

FULL COLOUR THINKING



Venture Capital in Emerging Economies: A comparative study between South Africa and Poland

A Dissertation
presented to

Graduate School of Business
University of Cape Town

In partial fulfilment
of the requirements for the
Master of Philosophy in Development Finance Degree

By

Pumeza Ndzululeka

Supervised by: Prof. Joshua Abor

December 2012

The copyright of this thesis vests in the author. No quotation from it or information derived from it is to be published without full acknowledgement of the source. The thesis is to be used for private study or non-commercial research purposes only.

Published by the University of Cape Town (UCT) in terms of the non-exclusive license granted to UCT by the author.

PLAIGIARISM DECLARATION

I know that plagiarism is wrong. Plagiarism is to use another's work and pretend that it is one's own.

I have used a recognised convention for citation and referencing. Each significant contribution and quotation from the works of other people has been attributed, cited and referenced.

I certify that this submission is my own work.

I have not allowed and will not allow anyone to copy this essay with the intention of passing it off as his or her own work.

Signed

Pumeza Ndzululeka

ABSTRACT

This study evaluates the venture capital sector in emerging economies with reference to the South African and Polish venture capital markets. The study focuses on the entrepreneurial, regulative and governmental factors that characterise emerging market venture capital sectors as well as the role that venture capitalists play in economic development. Emerging market venture capital characteristics, similarities and differences found from the literature review were tested in the South African venture capital market by conducting semi-structured interviews with six members of the South African Venture Capital and Private Equity Association. The findings confirm similarities between the two markets and highlight a few differences. The findings also show that South African VCs have very different experiences compared to the Asian VCs mainly due to institutionalization. In conclusion emerging market VCs sectors in Poland and South Africa are seen as having environments that are not deterrent to the growth of the venture capital sector but which with a few adjustments can spur on greater growth of the sector.

Keywords: Venture Capital, emerging market, development

TABLE OF CONTENTS

PLAGIARISM DECLARATION.....	1
ABSTRACT.....	2
TABLE OF CONTENTS.....	3
LIST OF FIGURES AND TABLES.....	7
1 INTRODUCTION.....	8
1.1 Research Area.....	8
1.2 Problem Statement.....	9
1.3 Purpose and Significance of the Research.....	9
1.4 Research Questions and Scope.....	10
1.5 Research assumptions	11
2 LITERATURE REVIEW.....	12
2.1 Origins of Venture Capital: The American model.....	13
2.1.1. Characteristics of the US VC market.....	15
2.2. Venture Capital in emerging economies; the Asian experience.....	18
2.2.1. Characteristics of the Asian VC markets.....	20
2.3. Overview of the South African Private Equity and Venture Capital Market.....	24
2.3.1 Origins and development of the S.A Venture Capital Market.....	25
2.3.2. Size of the S.A Private Equity market.....	26
2.3.3. Sector Concentration of funds and stage of investment	26
2.3.4. South Africa and other VC markets.....	29
2.3.5. The South African VC Market and Economic Development.....	30

2.3.6. Key Challenges to the growth of the South African VC Market.....	32
2.4. Overview of the Polish¹ Private Equity and Venture Capital Market.	35
2.4.1. The Origin and development of the Polish Venture capital Market....	36
2.4.2. Size of the Polish Private Equity market.....	38
2.4.3. Sector Concentration of funds and stage of investment.....	38
2.4.4. Poland and other VC markets.....	40
2.4.5. The Polish VC Market and economic development.....	41
2.4.6. Key Challenges to the growth of the Polish VC Market.....	44
3 RESEARCH METHODOLOGY.....	45
3.1 Research Approach and Methodology.....	45
3.2 Data Collection, Frequency and Choice of Data.....	46
3.2.1. Secondary data.....	46
3.2.2. Primary data.....	46
3.2.3. Data Collection.....	46
3.3 Sampling.....	47
3.4 Data Analysis Methods.....	48
3.5 Limitations.....	48
4 RESEARCH FINDINGS, ANALYSIS AND DISCUSSION.....	49
4.1. The Venture Capitalists	49
4.1.1 Background of the Venture Capitalists interviewed.....	49
4.1.2. Source and structure of the fund.....	50
4.1.3. Sector Focus.....	53

¹ PPEA freely available annual reports only up to 2005 thus limiting the scope of the research to some degree

4.1.4. Stage of Investment.....	54
4.1.5. Range of investment size in stages.....	55
4.1.6. Number of current investments per stage.....	57
4.1.7. Summary of Respondents' profiles.....	58
4.2. Emerging Market VC Characteristics.....	60
4.2.1 Entrepreneurs.....	60
4.2.2. Government.....	64
4.2.3. Regulations.....	66
4.2.4. General.....	69
4.3. Venture Capital and Development.....	70
5 RESEARCH CONCLUSIONS.....	74
5.1 What characterised the early American VC model and can the model be adopted by emerging markets?.....	74
5.2 What characterised the early American VC model and can the model be adopted by emerging markets?.....	77
5.3 What are the key challenges that emerging country VCs face; lessons from Asia.....	78
5.4 Are there any similarities and differences between the South African and Polish VC markets?.....	79
5.5 What are the key challenges to the growth of the South African and Polish VC markets?.....	79

6	RECOMMENDATIONS FOR FUTURE RESEARCH.....	81
	REFERENCES.....	82
	APPENDICES.....	88

LIST OF FIGURES AND TABLES	Page
Figure 1:SAVC classification.....	6
Figure 2: Size of funds under management.....	20
Figure 3: Investment by sector and stage.....	21
Figure 4: Investment by sector only (2009&2010).....	22
Figure 5: Private Equity Fundraising by BRICS (2002-2010).....	23
Figure6: Size of committed funds.....	32
Figure 7: Stage of investment.....	33
Figure 8: Fundraising for CEE Private Equity.....	33
Figure 9: Current investments.....	50
Figure 10: Employment growth.....	64
TABLE: 1 Sample Size.....	41
TABLE 2: Source of funds.....	44
TABLE 3: Sector Focus.....	46
TABLE 4: stages of firm investments.....	47
TABLE 5: Min and Max investments per firm, per stage.....	49
TABLE 6: Characteristics of emerging market entrepreneurs.....	53
TABLE 7: The government's role in the VC sector.....	57
TABLE 8: Regulations and the VC sector in South Africa.....	59
TABLE 9: Number of firms invested in since inception.....	64
TABLE 10: Employment opportunities per VCs' transactions.....	64

1. INTRODUCTION

1.1 Research Area

Venture capital has its roots in the American Silicon Valley model (Gompers & Lerner, 2001; Koh & Koh, 2002; Smith & Smith, 2004). Venture Capitalists provide much needed financing to high growth potential, high risk businesses which normally have intangible intellectual property based assets at inception (Gompers & Lerner, 2001; Da Rin, Hellmann & Puri, 2011; Ahlstrom & Bruton, 2006). The Venture Capital sector (VC henceforth) focuses on seed, start-up and expansion capital that is in the form of convertible preferred equity and on Information technology, medical sciences and bio technologies sectors (Da Rin et al. 2011; Salehizadeh, 2005). According to Da Rin et al. (2011) convertible preferred equity (CPV henceforth) is a security that combines debt like preferred security with an option to convert into an equity-like security.

Da Rin et al. (2011) provide a synopsis of findings by Samila and Sorenson (2011), Mollica and Zingales (2007), Popov and Roosenboom (2008), Davila, Forster and Gupta (2003) and Engel and Keilbach (2007) that suggest that VC has a positive effect on company productivity, new business creation and employment. Apart from these positives VC also creates monetary value for the Limited and General partners as well as the entrepreneur. These findings have resulted in many scholars concluding that VC is a fundamental driver of economic growth (Ahlstrom & Bruton, 2006). The success of the VC model used in the United States prompted other developed nations such as the United Kingdom and Israel to adopt it (Ahlstrom & Bruton, 2006; Hege, Palomino & Schweinbacher, 2006). Seeing the benefits of focused, innovation driven, value added operations in the developed economies, many emerging economies embarked on creating environments that would foster the growth

of the VC sector. Most of the literature on emerging economies and venture capital is focused on India, Brazil, China, Russia and the broader Asia and Europe (Ahlstrom & Bruton, 2006, 2003; Bruton, Ahlstrom, & Yeh, 2004; Dossani & Kenny, 2002; Tsang, 2002; Chi & Padgett, 2002; Salehizadeh, 2005).

1.2 Problem Statement

As stated above, most research on VC and emerging markets is on Asia, Europe and Brazil. The VC sector in South Africa and most of Africa is not well documented. Comparative studies of African economies with other emerging economies are especially rare. Hege et al. (2006) also note the scarcity of comparative data on VC economies both developed and emerging.

The main objective of the study is to determine if emerging country VC markets have any similarities and differences and if they have adopted the American VC model as it is. These characteristics will be presented with focus on entrepreneurship and entrepreneurs, the governments' role, regulations, institutions and the market. Due to the Asian emerging VC markets being well documented and developed compared to the South African and Polish markets a synopsis of these markets is made, the foci being the Chinese and Indian markets.

1.3 Purpose and Significance of the Research

According to Darin, Nicodano and Sembenelli (2004) most economies are now more dependent on innovation and entrepreneurship for achieving sustained growth and the Silicon Valley VC model has driven these factors in the US. The American VC market has long been

documented see Hege et al. (2006) and Gompers and Lerner (1999, 2001) but as stated previously this paper aims to document similarities and challenges that are faced by emerging country VC markets on the backdrop of the US market.

Saxenian (2007) and Ahlstrom & Bruton (2006) have found that the VC sectors in emerging economies such as India and China are somehow thriving even though they lack the institutional stability that has been associated with the success of the American model. They have found that networks and social connections are more important in emerging economies and provide security where the rule of law fails to. Documented challenges of VCs operating in India and China include underdeveloped legal frameworks, uncertainty of property rights, corruption and lax corporate governance standards, ambiguous capital markets as well as underdeveloped labour laws (Ahlstrom & Bruton, 2006).

This research paper aims to also determine if the Polish and South African VC markets embody the same characteristics of growth and challenges that the Indian and Chinese emerging VC research shows thus adding to the literature on VC in emerging economies that already exists.

1.4 Research questions and Scope

The main research question is whether there are similarities in emerging country VC markets drawing from the comparison between the South African and Polish markets. The research data collection and analysis will focus on answering the following sub questions;

- a) What characterised the early American VC model and can the model be adopted by emerging markets?
-

- b) What are the key challenges that emerging country VCs face; lessons from Asia.
- c) Are there any similarities and differences between the South African and Polish VC markets?
- d) What are the contributions of the South African and Polish VC markets to the economic development in the two countries?
- e) What are the key challenges to the growth of the South African and Polish VC markets?

1.5 Research assumptions

The foci of the research is the South African and Polish VC markets, comparative analysis of the two economies was undertaken because of the evident similarities between the two economies. Both are classified as advanced emerging economies and have mining, construction and coal products among their top industries; both have only come into democratic rule in the last two decades and have fairly advanced financial markets (Klonowski, 2005; Bliss, 1999; Lamprecht & Swart, 2010).

The second limitation is the use of the Southern African Venture Capital and Private Equity Association (SAVC) members as the SA Venture Capital universe and the members of the Polish Private Equity Association as the Polish VC universe. The research is limited to data that is freely available on the PE/VC markets of the chosen countries and the scope mentioned in the research questions above.

2. LITERATURE REVIEW

The venture capital sector as a subset of the larger private equity sector has become quite significant within many countries' financial services industries primarily as an alternative funding strategy or investment class (Makomva, 2010; Fourie, 1999). Private equity refers to shareholder capital invested in companies that are not publicly listed on stock exchanges, this means that VCs purchase equity or equity linked stakes in firms that are privately held (Makomva, 2010; Gompers & Lerner, 2001). Gompers and Lerner (1998) further define private equity as being inclusive of venture capital, leveraged buyouts, consolidations, mezzanine and distressed debt and hybrids such as venture leasing and venture factoring. Gompers and Lerner (2001) define venture capital as "independent, professionally managed, and dedicated pools of capital that focus on equity or equity linked investments", see also Davila et al. (2003); Hellmann & Puri, (2000); Hellmann, (2000) and Seppa (2003).

The PE industry is broken into firms that engage in early stage developments and later stage developments. The SAVCA classifies the stages into;

- 1) Venture Capital: early stage investment which includes seed and start-up capital.
- 2) Development capital: this can be both an early stage and later stage investment as it is expansion capital.
- 3) Buy-out funding: this capital is used in the later stage of a firm's development, existing management may want to buyout shareholders or another company may wish to take over the company. This category encompasses mergers and acquisitions (Lamprecht & Swart, 2010).

Figure 1:SAVC classification

Figure 1: Private equity investment stages

Private equity category	Stage of business development	Typical application
Venture capital	Seed capital	Funding for research, evaluation and development of a concept or business before the business starts trading.
	Start-up and early stage	Funding for new companies being set up or for the development of those which have been in business for a short time (one to three years).
Development capital	Expansion and development	Funding for growth and expansion of a company which is breaking even or trading profitably.
Buy-out	Leveraged buy-out or buy-in	Funding to enable a management team or empowerment partner, either existing or new, and their backers to acquire a business from the existing owners, whether a family, conglomerate or other. Unlike venture and development capital, the proceeds of a buy-out generally go to the previous owners of the entity. Buy-outs are often leveraged.
	Replacement capital	Funding for the purchase of existing shares in a company from other shareholders, whether individuals, other venture-backers or the public through the stock market. Unlike venture and development capital, the proceeds of replacement capital transactions are generally paid to the previous owners of the entity.

Source: KPMG&SAVCA, 2010

2.1 Origins of Venture Capital: The American Model

According to Smith and Smith (2004) VC fills a niche between early stage private investment by the entrepreneurs, family, friends, business angels, banks, corporations and governments. Venture capital transactions are characterised by high levels of uncertainty, information asymmetry and few tangible assets. Venture capital however, is not suitable for all businesses as some might be better off with debt capital instead of equity financing and as mentioned previously these firms must have high growth potential (Da Rin et al. 2011).

Smith and Smith (2004), Gompers and Lerner (1998), Ibanez(1989) and Roodt (2007) all document the origins of VC and mention the VC pioneer American Research and Development (ARD) established in 1946 whose \$70 000 investment in Digital Equipment corporation (DEQ) in 1956 grew to \$350 Million by 1971 thus proving that venture capital can be profitable. ARD was established as a closed end mutual fund which meant that the total capital investment remained fixed (Smith & Smith, 2004). Closed-end funds were

publicly traded and had indefinite life spans unlike the limited partnership VC model that was first formed in 1958 by Draper, Gaither and Anderson. The limited partnership VC model meant that funds could only be raised from a smaller pool of hand selected individuals (Gompers & Lerner, 2001).

As the VC industry grew and firms such as ARD made considerable gains the state took notice. The US government saw the budding VC industry as a means of driving innovation and ensuring that the country had a competitive advantage over its counterparts. To foster the growth of VC the state established an investment vehicle called the Small Business Investment Companies (SBICs) program. The program enabled both new and more established venture capitalists to raise risk capital from the state. The SBIC program however, had restrictive regulations that led to more established venture capitalists shunning it and an adverse selection problem. Fraudulent establishments and individuals took advantage of the program and as a result most SBICs collapsed in the 1960s and 70s (Gompers & Lerner, 1998, 2001; Seppa, 2003).

According to Gompers and Lerner (1998) the regulatory amendments pertaining to pension funds in 1972 and those pertaining to capital gains taxes³ reduction established a favourable environment for increased investment in the highly innovative technology industry. Many new players entered the American VC markets, bad decisions were made by many and the upsurge of activity in VC markets experienced from the late 1970s, 1980s and early 1990s quickly turned into a strong decline in activity in these markets (Roodt, 2007; Da Rin et al. 2011). Between 1998 and 2000 fundraising increased rapidly from \$18 Billion to \$110

² Clarification of the ERISA prudent man rule to mean that portfolio diversification was a consideration in determining the prudence of individual investors.

³ In 1993 Capital gains tax was reduced further from 28% to 14% post the 1978 reduction.

Billion a year (Seppa, 2003). Annual new VC commitments were at \$104.9 Billion in 2000 and dropped to only \$40 billion in 2001 (Smith & Smith, 2004). According to Green (2004) between 1999 and 2001 the VC industry raised over \$ 200 billion and invested about the same amount. This large volume of investment coincided with the sudden decline of the telecoms industry resulting in a strong decline in the stock market that would last for three years known as the Internet Dot Com Bubble (Kenny et al. 2002; Da Rin et al. 2011). The VC market contracted tremendously and negative returns were experienced from 2000 to 2003. Despite this huge decline the American VC market was still the global leader in terms of size, funds raised and investments.

2.1.1. Characteristics of the US VC market

The Morden form of the VC is that of a limited partnership with a definite life span of 7 to 10 years after which the venture capitalist exits the transaction through a listing or a private sale (Da Rin et al.2011; Gompers & Lerner, 2001). The General and Limited partners however can decide to continue and the GP will then raise more funds for more investments. Because of the high uncertainty and information asymmetry in VC transactions the US VC market and others built on this model are characterised by stages of financing that are approved when the entrepreneur reaches certain milestones (Seppa, 2003).

Black and Gilson (1998) emphasizes that VC markets are crucial for macroeconomic growth and job creation; he also views them as providing the link between finance and innovation, see also (Jeng & Wells, 2000). Many authors believe that the American VC model cannot be mimicked duplicated or emulated elsewhere (Hege et al., 2003; Megginson, 2001; Deventer& Mlambo, 2008). Gompers & Lerner (1998; 2000) also identified a list of characteristics of the

American VC market that they viewed as drivers of VC fundraising, Megginson (2001) also identified factors that are characteristic of the American VC market and which have fostered the VC markets' growth. Saxenian (2007) also identified what she termed as “pre-conditions for growth”.

The consolidated list is;

- Government support of the industry.
- Sound monetary and fiscal policies, stable inflation and currency.
- Enabling regulatory framework (e.g. pension funds and capital gains tax).
- Secure property rights
- Strong rule of law, good corporate governance and well regulated labour markets.
- Higher GDP growth and increases in R&D spending.
- Specialised financial intermediaries (VCs).
- A strong R&D culture into IT, medical and bio-technology fields especially in universities or national labs.
- Innovative, risk taking entrepreneurs.
- Access to large sums of capital.
- A funded pension system, with risk-tolerant institutional investors.
- Good firm reputation and size.
- VC investment must be convertible to equity even if of a loan nature initially.
- VC has a sit or sits in the firm's board of directors to enable the GP to be actively involved in the business, monitoring, mentoring and setting up new networks.
- Frequent use of convertibles and the replacement of entrepreneurs.
- Syndication is more prevalent in the US.
- US firms have better screening skills due to greater experience.

- Good projects financed intensively in initial stages resulting in less financing being required in later stages.
- Strictly regulated, liquid and transparent stock markets.
- A vibrant IPO market, though this could be a result, rather than a precursor of a strong VC industry.

Government policies have played a very crucial indirect role in fostering the development of the VC industry in the US and in ensuring transparency, predictability and reduced risk for investors (Kenny, Han & Tanaka, 2002; Da Rin et al. 2004). Firstly, the US has always ensured that it had sound monetary and fiscal policies that ensured relatively low inflation interest rates with a stable environment and currency. Secondly, favourable capital gains tax policies had a positive effect on VCs. Thirdly, the introduction of the prudent man rule allowing pension funds to invest prudent amounts in VCs helped sustain the industry. The SBIC program had great benefits for new VC firms such as funding on a two to one ratio of privately raised funds, income and capital gains pass throughs and allowing a carried interest as compensation (Lerner, 1999). The program allowed for the rapid growth of VCs that were genuine and there have been a number of success stories that did not falter in the mid-1970s. The US government also had a program that invested heavily and continuously in university research especially students in the sciences and technology. Lastly, the NASDAQ stock market which is considered as the technologies stock market has long been strictly regulated thus allowing for a transparent, safe exit for most VCs (Kenny et al. 2002; Seppa, 2003; Gompers & Lerner, 2001; Black & Gilson, 1998).

The above characteristics of the American Silicon Valley model present a big challenge for other markets particularly emerging markets in emulating the American model. Even though this remains a challenge the internet crash in the US left many firms with large amounts of

capital to invest but fewer opportunities. Most of these US firms looked into emerging markets particularly Asia to invest and thus established a multitude of subsidiaries in China, Taiwan, Singapore and a few other Asian countries (Ahlstrom, Bruton & Yeh, 2007).

2.2. Venture Capital in Emerging Economies; the Asian Experience

Following the successes of the VC industries in the US, Israel and some of the UK, emerging economies VC markets have been growing steadily amidst very different challenges, institutions and structures than those of the successful Silicon Valley model(Ahlstrom & Bruton, 2006; Kenny et al. 2002).Emerging economies are rapid growth industries that are reforming their economies to increase the number of transactions governed by market forces (Ahlstrom & Bruton, 2006). While markets such as China, India, Taiwan, Hong Kong, Russia, Poland and South Africa are all classified as emerging economies and might even be in the same continent such as Asia's' China and Hong Kong their VC industries are similar but not identical because of differing levels of entrepreneurship, national systems of innovation, political economic development, labour practices, education and business culture and corporate ownership regulations (Ahlstrom & Bruton, 2006;Da Rin et al. 2011; Kenny et al. 2002). Unlike developed economies unpredictability, volatility and underdeveloped and less regulated institutional environments characterise these markets (Peng, 2000; Ahlstrom et al. 2007).

With the exception of Japan the VC sector in Asia was established through and with international linkages (Kenny at al., 2002). The International Finance Corporation (IFC) identified Korea and Malaysia as having greater potential for VC growth in 1986. When the IFC started investing a few western VC firms also ventured into Asia looking for investment

opportunities. It was not until the 1990s that there was a boom in the number of western VC firms operating in Asia. Apart from a few independent VC firms, corporate venture capitalists (CVCs) such as Intel Capital have made tremendous contributions to the growth of the VC sector in Asia with focus on China, India, Taiwan, Singapore, Malaysia, Korea and Hong Kong. As a result of Intel Capital's bold move into Asia in the late 1990s more CVCs ventured into Asia in the early 2000s such as Cisco systems, Sun Microsystems and Nokia Venture Partners (Kenny et al. 2002). In a bid to grow investment in Asia and globalise VC many Asian governments (e.g. Singaporean government) invited VC firms in Europe, Israel and the US to establish operations in Asia in exchange for investment.

According to Kenny et al. (2002) the US and Asian markets have similar early stage investment patterns but the US invests more in the expansion, mezzanine and later stages. This is due to the strong family ownership structure of firms in Asia as a result firm owners have a general unwillingness to sell control over existing firms. While the US investments clusters are focused on IT, medical and bio technology sectors, Asia is largely characterised by manufacturing sector investments with the exception of Taiwan which places emphasis on electronics. Taiwan has had the most successes with venture capital primarily because of its early links with US electronics manufacturing subsidiaries that established operations in Taiwan in the 1970s. China has an industrial and energy sector focus, Hong Kong has a communications focus and India focuses on software and software services. Korea however saw VCs investing in media, particularly in movies when most *chaebol* ownership structured firms folded post the Asian financial crisis (Shim, 2006). These VCs were so successful reporting returns of 200 per cent to 300 per cent on investments e.g. KDB Capital and KTB network.

2.2.1. Characteristics of the Asian VC markets

A number of scholars have findings that suggest that emerging economies particularly those in East Asia have nascent institutional development and place greater importance and dependence on informal institutions and social networks, see Bruton Ahlstrom and Singh (2002), Ahlstrom and Bruton (2006) , Peng (2003) and Kenney et al. (2002). Perhaps the best case for showcasing this is China, according to White, Goa and Zhang (2002) China's VC industry is an outcome of its particular combination of political, economic and social institutions and the broader changes it has undergone during its transition from central planning to a more market based system. These factors clearly show that the Chinese VC industry will never be a carbon copy of the Silicon Valley model as its history and so that of its institutions is distinctively different.

The issue of ownership with the prevalence of family owned businesses and unsecure property rights have hindered the growth of the VC sector in Asia. For many years VCs had to contend with 5%, 11% or 17% shares in the businesses that they invested in, such small equity stakes meant that VCs had no control over the firms and played an advisory role that would be overridden easily if the "family" did not agree with the VC's views. The ownership issues prevented the VCs from making large investments in the firms, the limitation of their input into the strategic decisions of the firm meant that they had much lower value added into the business than their American counterparts (Ahlstrom& Bruton, 2011; Kenney et al. 2002). The firms would not only be unwilling to sell large portions of equity to the VC only but in IPOs as well thus making securing gains in exits harder for the VCs.

Asia lacks advanced educational institutions with a focus on R&D for entrepreneurship. According to Kenny et al. (2002) with the exception of China, higher education professionals

around Asia are not encouraged to be entrepreneurial. The American Silicon Valley model has its roots in higher education institutions and the American government understood this and placed greater emphasis on funding science and engineering students to spur growth and development on.

Asian stock markets particularly those associated with high-tech industries have been plagued by illiquidity and the inability to secure investor protection. Proliferation of exchanges to facilitate capital raising and provide exit paths for VCs has resulted in illiquidity thus opening exchanges to abuses such as insider trading (Kenney et al., 2002). Because of these problems the NASDAQ continues to be the exit exchange of choice for many VCs.

Most Asian economies have always had a sense of specialization. The governments would choose certain focus areas, drive these by implementing policies and giving the funding that would drive the growth of these focus areas. The greater dependence on the government for providing target areas and funding limited entrepreneurship (White et al. 2002). One of the fundamental requirements for VC to thrive is innovative, risk taking entrepreneurs who are not afraid of starting new technologies, products and industries thus the limitation of a government given path limited innovation.

In China the government took on an interventionist role in the VC industry by setting up the first domestic VC. This was as a result of the National Research Centre of Science and Technology for Development suggesting that China establish a VC system to promote high technology in 1984 (Ahlstrom et al. 2007). The governments' attempt at venture capital failed resulting in many scholars agreeing that the government is better off playing a supportive role in the VC markets; see (White et al., 2002; Batjargal, 2005; Hellmaan, 2000; Ahlstrom & Bruton, 2006).

Because most domestic VCs in Asia are relatively young a lack of expertise and professionally trained managers with experience in selecting, monitoring and adding value to firms is rampant. Policies, regulations and incentives for VCs need to be adjusted to shift VCs who have moved to investing in expansion and pre-IPO stage projects back to start-up and seed stage investing (White et al.2002). Perhaps the most harming intervention or “non-intervention” by the Chinese government that has been detrimental to the growth of VCs is them not being able to list in China’s domestic stock exchanges (Zeng, 2004), others, however, such as White et al.(2002) view this factor as having protected many of China’s young domestic VCs from the Dot Com bubble in the early 2000s and thus not to be that bad.

A consolidated list of the characteristics of the emerging Asian VC markets;

- State has control over the majority of resources
- State plays an interventionist role in the VC industry
- Pension funds not allowed to allocate funds to VCs
- Low level of economic development
- Underdeveloped institutions
- Ill-defined property rights
- No legitimacy for private firms
- Low levels of entrepreneurship
- Lack of active markets for corporate control
- Higher education institutions not as prestigious as those in developed nations
- Business cultures differ tremendously to the West
- Lack of intellectual property protection, assets can be seized and held with little recourse to the owner
- Lack of established public equity markets for exit

- Venture capital industry predominantly foreign VCs, Government VCs, Corporate/Captive VCs, Bank VCs and university VCs not the independent limited partnerships prevalent in the US.
- Minimal enforcement of laws
- Strong reliance on social network ties
- Lack of well-educated professional managers with required expertise
- Firms not adhering to globally accepted accounting standards for reporting thus making it harder to conduct due diligence and determine the viability of the proposed investment.
- Corporate governance regulations weak and generally unenforceable
- Distinct provincial and regional markets sometimes with varying laws
- Prevalence of conflicting goals between entrepreneur and VC
- Majority of firms are family owned
- VCs get minority stakes in firms unlike the majority stakes and board seats that they get in the developed economies
- VC exit mechanism more constrained and complex, usually strategic sales
- Low returns for the VC between 20-25% the norm

These well documented characteristics of the Asian emerging economies VC industries differ fundamentally from the Silicon Valley model primarily because of the history of the studied nations. Withstanding all these differences the core practices of venture capital are the same as those originally identified in the US as (1) Selecting portfolio companies, (2) Monitoring and due diligence, (3) Mentoring and providing value added services, (4) Exiting the investment and lastly (5) Distributing returns to Limited Partners (Da Rin et al. 2011; Ahlstrom et al. 2007).

2.3. Overview of the South African Private Equity and Venture Capital Market

South Africa (S.A) is classified as a developing country/upper middle class/emerging economy. According to the FTSE (2012) definition S.A is classified as an Advanced Emerging (AE) economy. Advanced Emerging markets are upper or lower middle income GNI countries with advanced market infrastructures or high income GNI countries with less developed market infrastructures. South Africa has recently joined the fast growing developing economies group BRIC (Brazil, Russia, India, China) amidst a cloud of controversy because it is viewed as a much smaller economy (GDP) compared to the four whereas it has a higher GNI than most of them ('BRICS can build common currency', 2011). It is important to note that high GDP growth fosters the development of VC markets as noted previously.

2.3.1 Origins and development of the S.A Venture Capital Market

In the 1980s developments in both international and domestic markets spurred growth in private equity markets in South Africa. Toward the end of the 1980s the National Party government announced its intention of privatizing some of the major parastatals/ State Owned Entities (SOEs), including ESKOM, ISCOR, FOSKOR, the postal service, the telecommunications services (TELKOM) and railway lines (Zahralddin-Aravena, 1997). According to Ahlstrom et al. (2007) privatization, strategic sales and restructuring of SOEs provides very attractive deal sources for private equity firms. ISCOR was sold in 1989. The South African Railways and Harbours Administration was reorganized and renamed in 1985 as the South African Transport Services (SATS) it then became a corporation in 1990 called TRANSNET.

When South Africa's first democratic government came into power in 1994, it adopted a policy of privatisation resulting in even more late stage investments such as leveraged buy-outs (LBOs), Management Buy-Outs (MBOs) and empowerment deals mostly in the form of replacement capital. The establishment of Black Economic Empowerment (BEE) private equity funds in the period 1999/2000 made more funds available in the PE market. In 2010 black investment professionals in the PE industry totalled 43% of the industry's total (SAVCA&KPMG, 2010). It is clear that the South African government acted as an enabler for the South African private equity markets to grow. The South African government also set up institutions such as the Industrial Development Corporation with departments dedicated to VC and PE to drive the growth of these industries (IDC,2012).

In 1998 the formation of the SAVCA gave a "face" to the growing PE market and made available information on the industry that would draw more investment into the country. As the global investor began to increasingly recognise private equity as a new, attractive asset class more funds flowed into the industry. South Africa also experienced this growth and benefited from the global trends as well as the view from governments and development agencies that private equity and venture capital were crucial for macroeconomic growth and job creation (SAVCA & KPMG, 2011). According to SAVCA and KPMG (2010);

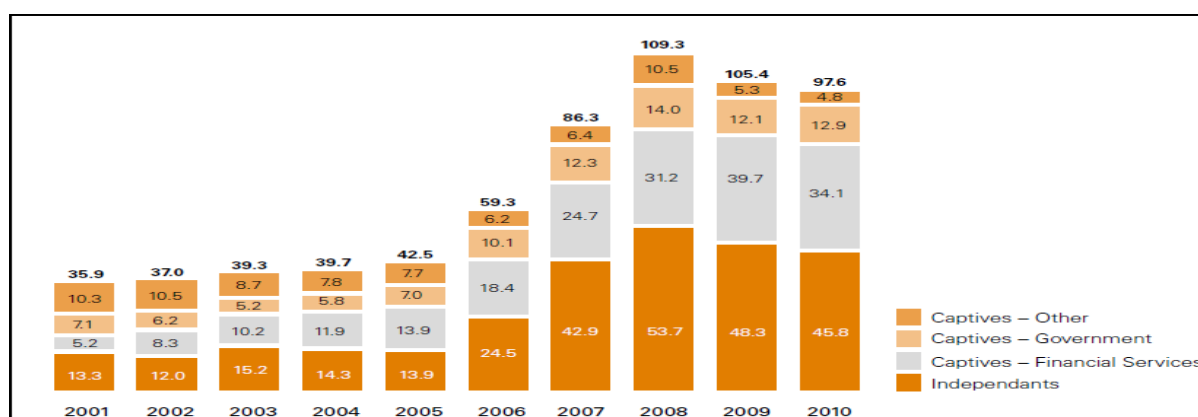
"It may be argued that South Africa has one of the most sophisticated private equity industries among emerging and developed markets, with different funds at all stages of business development, from start-up venture capital funds through to late-stage and buy-out funds"

2.3.2. Size of the S.A Private Equity market

From 2000-2011 the South African PE market grew tremendously. Initially PE funds were sourced from institutional investors such as pension funds and insurance companies. By the year 2000, 40% of funds under management were owned by independent funds (SAVCA&DBSA, 2009).

Figure 2 below shows how the South African PE market has evolved. The chart clearly shows that rapid growth was experienced between 2006 and 2008. Post the 2008 financial crisis the funds under management also declined considerably especially between 2009 and 2010.

Figure 2: Size of funds under management



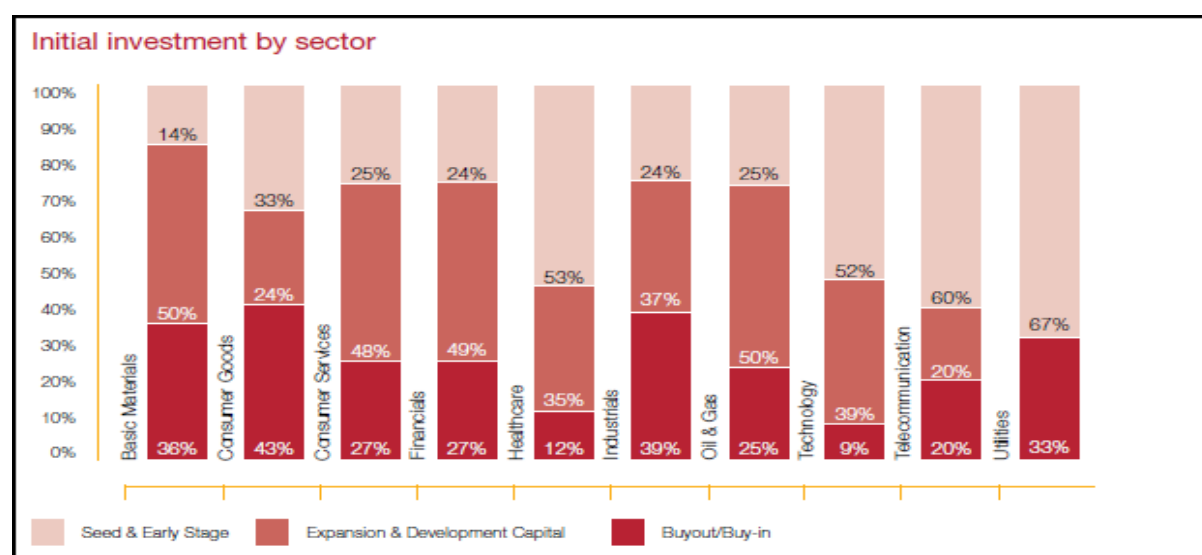
Source: SAVCA&KPMG, 2011

2.3.3. Sector Concentration of funds and stage of investment

Roodt (2007) found that the size and number of investments made in the early stages i.e. seed and start-up capital were much lower than those made in the later stages. The manner in which the South African PE market developed has had a huge influence in its fund

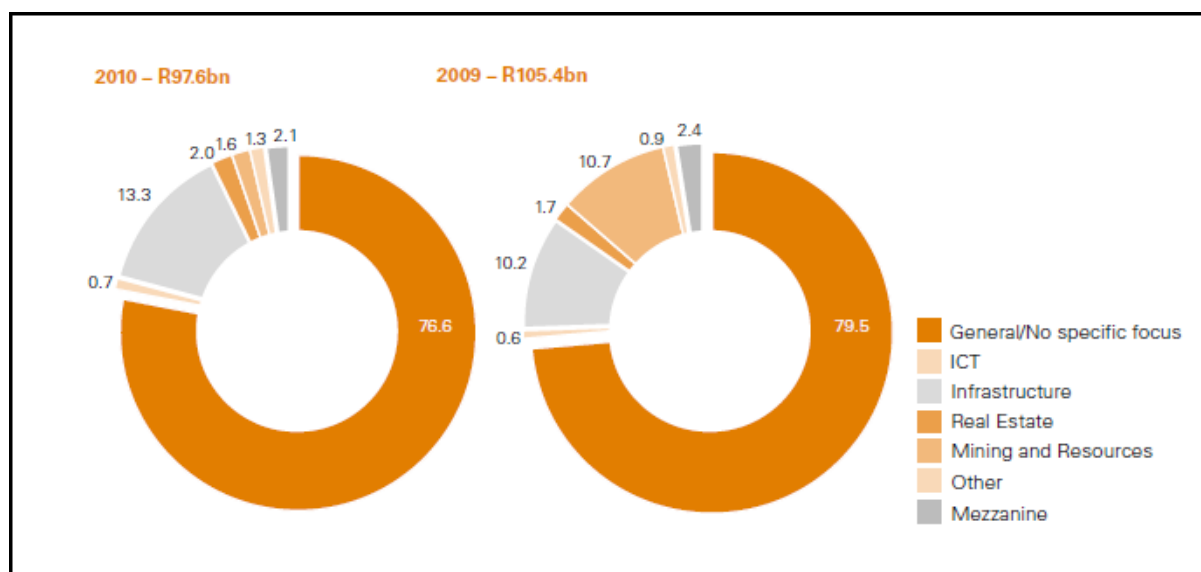
concentration. Deventer and Mlambo (2009) noted that there is a higher demand for capital with greater risk and less returns in South Africa and that the increasing demand for early stage investments that is not being met might very well result in a situation where there are not enough later stage investments available in the future. Concentration of funds in the later stages is however not unique to South Africa but characterises all PE markets. As early as in 1984 the trend of decreasing relative participation of start-ups financing in the portfolios of venture capital firms and the counterpart increase in expansion financing already set the tone for years to come (Sagari&Guidotti, 1991).

Figure 3: Investment by sector and stage



Source: SAVCA&DBSA, 2009

Figure 4: Investment by sector only (2009&2010)



Source: SAVCA&KPMG, 2011

The same American trend of increased investments of VC funds in healthcare, alternative technologies and utilities is evident in the S.A market as depicted by Figure 3, Telecommunications are however, still high as 60% of investment in this sector is Venture Capital.

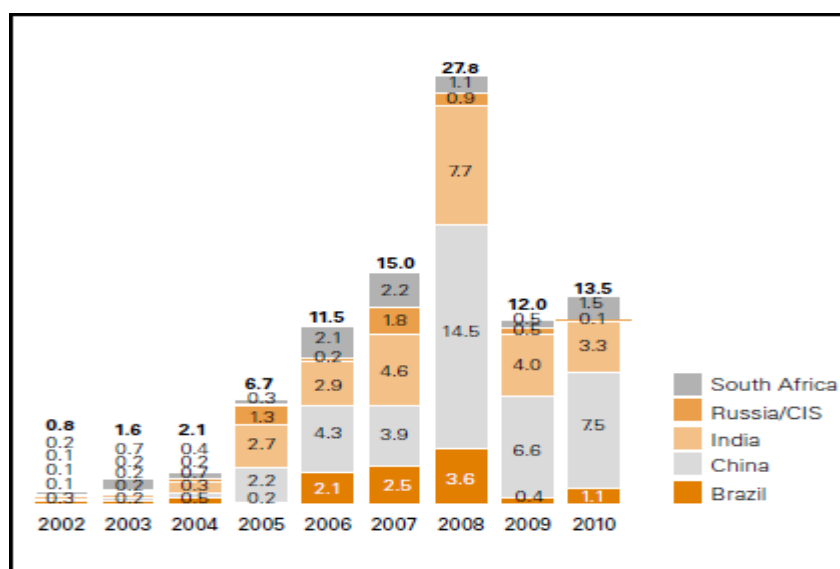
It is worth noting that the Dot.Com crash negatively impacted the PE market with a 17% drop in new investments. The market started recovering in 2005 and in 2007 new records in both volume and value were reached, with 599 new investments made at a value of R24.7bn, the latter representing a 357% growth on the previous year's figures. The global economic crisis has reversed this growth, although the R12.8bn new investments made in 2008 exceed the investment value of any year prior to 2007 (SAVCA&DBSA, 2009).

2.3.4. South Africa and other VC markets

Funds raised by S.A in relation to the other BRICS group of emerging countries is quite low. China and India appear to be more favourable investment climates for fund managers, see Figure 4 below. Roodt (2007) states that South Africa's private equity relative to GDP percentage is much higher than the European average and that for Asia Pacific. Compared to the developed markets of North America, the UK and Israel, South Africa did not fare favourably and is lagging behind.

In the top 30 ranking of aggregate deal value in 2010 by SAVCA South Africa ranked 21st with \$1.5 billion and Poland ranked 23rd with \$1.3 billion. This shows that these two countries have relatively similarly sized markets but further analysis is yet to be done.

Figure 5: Private Equity Fund raising by BRICS (2002-2010)



Source: SAVCA&KPMG, 2011

Perhaps the most pressing question regarding how S.A fares compared to the widely documented emerging economies such as China is how a country like China with its

institutional challenges can be more attractive than S.A to foreign VCs? South Africa has secure property rights, a government that acts as a supporter rather than an interventionist in VC markets, enforceable laws with regards to corporate governance, S.A financial reporting is on par with world standards thus making selection, performing due diligence and monitoring one's investments easier, S.A also has an advanced, liquid stock exchange and market with the potential of making exits easier. The next chapter will attempt to answer this question.

2.3.5. The South African VC Market and Economic Development

Many scholars have studied the link between entrepreneurship, employment, sales growth and development and have findings that suggest that these three factors are drivers of development, see Da Rin et al. (2011) and Sorenson and Stuart (2001). Venture Capital firms have been critical catalysts for the development of new high-tech industries in the US, Israel, UK and Asia, these new industries have in turn become important engines for economic growth and wealth creation (Sorenson & Stuart, 2001).

According to SAVCA and DBSA (2009) The Private Equity industry in S.A acts as a long-term provider of risk capital, it contributes to economic development by building sustainable businesses, increasing private sector participation in the economy, attracting private capital to the region and adopting world-class levels of corporate governance. The same study also acknowledges that private equity firms have a significant impact in improving lives and livelihoods through increasing GDP, employment and developing capital markets both in South Africa and across the continent.

According to Deventer and Mlambo (2009);

Although there has been a significant expansion in private equity activity in South Africa in recent years, the focus has not been on venture capital but rather on mergers and acquisitions activities by larger players. This is evident in the spate of buyouts that happened in the last two years. There is increased interest in South African companies by international players as these companies display strong earnings growth, improved exit values, and high dividend ratios, when compared to venture projects elsewhere in the world.

In South Africa VC operations are mainly concentrated in three of the four known stages of venture capital (SAVCA & Venture Solutions, 2010);

- Seed Capital: Funding for market research and product development is not normally associated with VC fund managers in South Africa.
- Start-up Capital: Funding associated with setting up operations such as getting offices, hiring staff, registering intellectual property etc.
- Developmental Capital: normally pre-revenue funding after start-up capital to further launch the business and get it to profitability.
- Growth capital: post revenue equity funding to assist established but still high-risk ventures in expanding activities such as acquiring competitor, developing new product lines or technologies, accelerating production or launching into foreign markets.

According to SAVCA & Venture Solutions (2010) the government through DFIs and the Technology Innovation Agency and Angel investors are the most active in early stage (seed) ventures where the size of investment is typically smaller than later stage VC transactions. In

South Africa Angel investors are known to invest well above the industry average. According to SAVCA & Venture Solutions (2010) R 2.638Billion was invested between 2000 and 2010 in the VC sector, by value 50% was invested as Start-up Capital, 35% Development Capital, 12% Growth Capital and only 3% as Seed Capital. The government through public funded VCs and DFIs concludes most seed type transactions because of its mandate of stimulating economic growth and entrepreneurship. The South African government since 2005 has intervened in the VC market through direct transaction participation. In the American and Asian cases direct government intervention failed as mentioned earlier with most scholars agreeing that the government should not directly intervene in markets but rather act as an enabler.

The South African VC sector is relatively very small in comparison to other countries' VC markets, many entrepreneurs are not aware of the existence of the sector or the role that VCs play, this and more challenges listed below have resulted in the slow growth of the VC sector in South Africa and its associated outcomes (SAVCA & Venture Solutions, 2010). Due to the confidentiality of the sector and its relatively small size it was impossible to gauge the aggregate employment that has been a direct result of the VC sector between 2000 and 2010.

2.3.6. Key Challenges to the growth of the South African VC Market

The South African VC market has many similarities to the other emerging economies VC markets. According to Zahralddin-Aravena (1997) South Africa has well developed infrastructure, financial systems and markets and good, enforceable legislation. South Africa has very well developed institutions and this puts it in a better position compared to its Asian counterparts.

The SAVCA and Venture Solutions survey (2010) noted the following impediments to growth of the South African VC asset class;

- a) **Exchange control regulations:** for the survey period exchange controls on money and intellectual property left VCs disadvantaged in their dealings. Foreign exchange controls hampered the internationalization of South African developed Intellectual Property. Regulations required IP to be sold outright meaning that the developer will not get any benefits when the product reaches bigger markets. South Africa also has a smaller internal domestic market meaning that the sales growth potential of investments is not big secondly the larger global market for high-tech ventures is in non-African countries.
- b) **Universities and Public funded IP legislation:** The VC sector is not aware of the risks inherent to adopting public funded IP, most VCs are fearful of governments' walk-in rights and the preference for the IP to remain the property of the public funded institution. Most VCs are also concerned about the inability of South African universities and sciences councils to develop IP that is ready for investment and which can find commercial applications outside of the research domain.
- c) **SA VC asset class very small:** The size of the South African VC sector is viewed by many as an impediment to its own growth. Most financial players enter a market when they see others' success stories and gains, with fewer willing to invest in these early stages there won't be enough success stories to share and the sector will now rapidly grow in competitiveness.
- d) **Entrepreneurs not aware of VC industry:** in South Africa most entrepreneurs are not aware of the role of VCs and the value that they could add to their businesses and as a result don't seek this kind of financing. This makes the pool of lucrative deals much smaller for VCs that are in the market.

- e) **The cyclical nature of VC:** a lot of VCs in South Africa are relatively new with most VC fund managers not having been there five years ago. This means that the funds are managed by less experienced and knowledgeable individuals who still need to learn how VC cycles work in order for them to make a good contribution to the industry.
- f) **Fund raising:** because VC is a relatively new asset class in South Africa most funds are invested in the later stages (replacement capital, LBOs, MBOs and later stage development capital). VC fund managers have the hard task of convincing investors that the high-risk inherent in these early stages will give them the expected returns.
- g) **Cumbersome regulations:** South Africa has a well-developed institutional framework, however, some of the legal requirements may hinder the growth of certain sectors and thus overall economic development e.g. some labour laws might make it hard to exploit certain technologies.
- h) **Lack of incentives to join VC sector:** Because of the risk inherent in this sector government should consider providing certain incentives such as tax breaks etc. to drive its growth as it is crucial for the development of new industries in the country and thus employment.
- i) **Focus sectors:** unlike the Asian emerging economies with clear sector foci for economic growth such as electronics, manufacturing, industry, energy and software and software services and communications, South Africa has no clear growth focus. Activity in the South African economy is largely based in the mining sector and recently the government driven infrastructure sector. There is no strong focus on innovation even in these sectors to improve efficiency in the “production” processes. Venture Capitalists in South Africa also have no clear focus sectors; there is no consensus whether South Africa is best suited to innovate in IT, telecommunications biotechnologies or medical technologies.

2.4. The Polish⁴ Private Equity and Venture Capital market: An Overview

According to the FTSE definition Poland like S.A is classified as an Advanced Emerging market (AE). Poland has a large domestic demand base and domestic spending. Like South Africa Poland fared well post the 2008 financial crisis because of its sound banking system, monetary and fiscal policies(The economist, 2011). Maintaining a floating exchange rate and being independent of the Euro group of countries has provided the country with greater insulation against the current Euro zone debt crisis (The Economist, 2012). Poland was also granted a precautionary loan of \$20 billion under the IMF' Flexible Credit Line in 2010 which it is yet to draw. The country is expected to grow at 3.8% in 2012 and that gives investors a positive outlook. Poland however has quite big budget deficits (7.3% in 2009 and 7.9% in 2010) ("Few woes in Warsaw", 2011).The country's government debt at 55% in 2011 was quite high for an emerging market. In the four years since the crisis began, the Polish economy grew by 15 percent underpinned by steady growth of private consumption, strong EU-funded public investment, and an upturn in private fixed investment ("Poland Continues As bright Spot in Region-IMF survey", 2012). Despite all these positives there is quite a bit of uncertainty around Poland and its plans to join the ailing Euro denominated group of countries.

Poland though stable has had relatively slow growth over the past decade compared to other emerging economies. The slow growth can be seen as a product of the same precautionary measures that have seen the country fare well in times of crisis. According to PPEA (2002) the Private Equity/ Venture capital industry in Poland has grown tremendously since its inception in 1990. The industry is being recognised as an integral part to the growth of the

⁴ PPEA freely available annual reports only up to 2005 thus limiting the scope of the research to some degree

Polish economy. Of the funds that had been raised in the period 1990 to 2002 (\$4.8 billion) by Polish PE funds, 70% were invested in Polish companies. Like the South African industry the PPEA acknowledges that private equity firms have a significant impact in improving lives and livelihoods through increasing GDP, employment and developing capital markets both in Poland and other European countries. Poland is considered to be the biggest PE/VC market in Central and Eastern Europe (PPEA, 2005).

2.4.1. The Origin and development of the Polish Venture capital Market

In the early 1990s entrepreneurship and innovation gained prominence as Poland's communist era came to a close (Bliss, 1999). As a result the Venture Capital industry began to grow and was established as an industry to watch (Klonowski, 2005). The first VC firm in Poland was the Polish American Enterprise Fund established in 1990 and capitalised at \$240 Million by the American congress (Klonowski, 2005). In 1992 Enterprise Investors who operated the first Polish VC founded the Polish Private Equity fund which grew to become the leading VC fund in Poland (Klonowski, 2005).

Poland emerged as a "transition" economy in the 1990s and was faced with challenges of privatisation and strong workers unions (Bliss, 1999). The Ministry of Privatisation organized tender processes to privatise leading companies in construction, beer brewing, machine tools, paper and food processing. These privatisation opportunities were the only real investment opportunities for VCs at the time and spurred on syndication as VCs co-invested with industry investors (Klonowski, 2005). The Polish experience with privatization and economic transition resulted in a distinctive history of ownership and control patterns. Concentrated ownership of resources where control is more often exercised by founder/managers, unlisted corporations owned by individuals, and foreign strategic investors was more

common (Klonowski, 2006a). In as early as 2002 direct state-ownership is still large in many enterprises and more generally, the state still maintains a large role in the corporate sector. Historically institutional investors, especially pension funds played a limited role in the Polish markets (Claessens, Klingebiel & Lubrano, 2002).

Like South Africa the Polish PE industry is characterised by MBOs and LBOs. The other big challenge for the Polish industry is that most fundraising is done in international markets (primarily US and Western Europe) and the culture of domestic investment is not yet established (Klonowski, 2006a). To stimulate more activity in PE markets the Polish government enacted a pension reform in 2000 which led to the establishment of private pension funds that will accumulate more than 55 billion euro till 2010 and may become the primary domestic contributors to Polish private equity (PPEA, 2002).

In 2002 and post Poland's accession to the European Union in 2004 the Polish PE industry attracted more investment from leading banks, pension funds and other institutional investors (Klonowski, 2006a). In 2004 Polish-based fund managers raised PLN 1.4 billion (EUR 303 million) of new capital for future investments this demonstrated the great potential and investor confidence in the Polish market (PPEA, 2005).

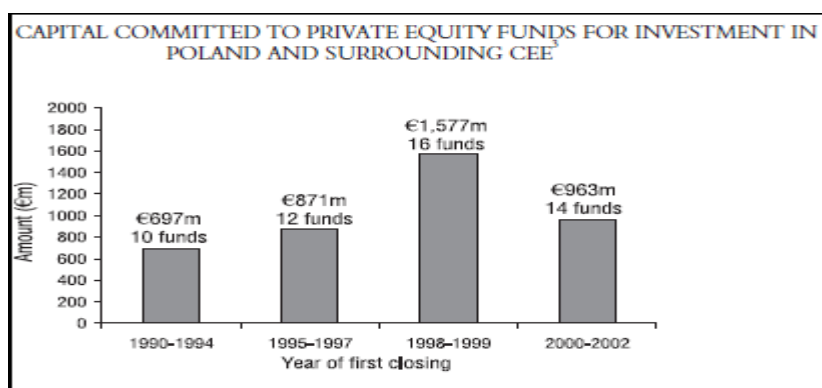
The different phases of the development of the Polish VC industry and its history are further discussed in Klonowski, (2005); Bliss, (1999); Klonowski, (2006a); Klonowski (2006b); Karsai, Wright, Dudzinski and Morovic, (1999) and Farag, Hommel, Witt and Wright, (2004).

2.4.2. Size of the Polish Private Equity market

From 2000-2011 the Polish PE market grew tremendously. Between 1990 and 2002 more than 60 private equity funds were established to invest in Poland and its neighbouring countries (part of CEE). During this period total committed capital was estimated at Euro 5 billion.

Figure 5 below shows how the Polish PE market has evolved. The chart clearly shows that rapid growth was experienced between 1997 and 1999. Post the 2001 dot.com bubble burst funds under management also declined considerably.

Figure 6: Size of committed funds



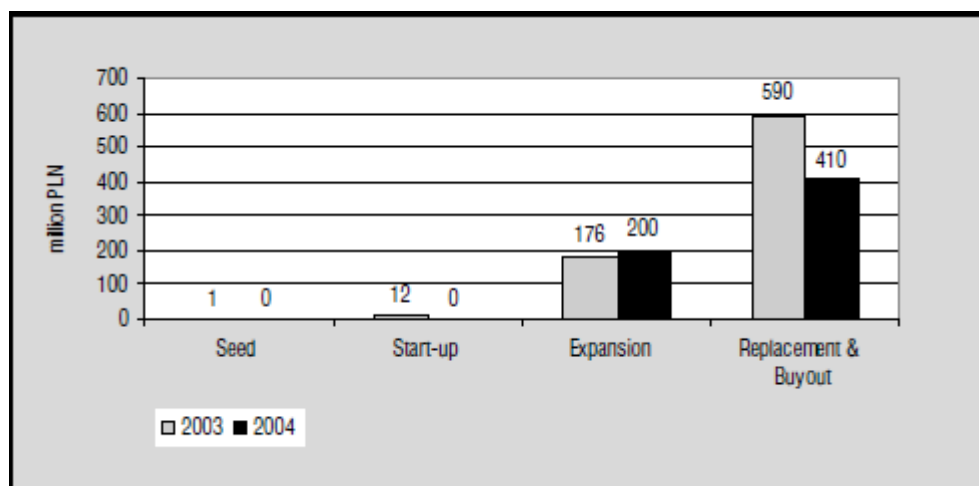
Source: PPEA 2003

2.4.3. Sector Concentration of funds and stage of investment

The trend toward later-stage transactions is clear both in Poland and Central Eastern Europe (CEE). Replacement and buyout represented the most common transaction route and accounted for 67% of total investment volume. The other 33% went into expansion financing. No seed-stage or start-up investments were reported in 2004. By contrast, in 2003 funds injected into later-stage companies represented 76% of total investment volume, while

expansion financing accounted for 23% and early-stage (i.e., seed and start-up) financing for 2% (PPEA, 2005).

Figure 7: Stage of investment



Source: PPEA (2005)

Figure 8 below shows that most funds under management were geared towards telecoms in both years. The South African market is slightly different with the majority of funds geared towards Utilities and Telecoms second.

Figure 8: Sector concentration of investments

PLN (thousands)	2003				2004			
	Amount of Investment	%	Number of Companies	%	Amount of Investment	%	Number of Companies	%
Telecommunications / media	173 719	29.7	13	27.1	199 306	33.8	6	17.6
Computer Related	523	0.1	1	2.1	0	0.0	0	0.0
Other Electronics-related	6 858	1.2	1	2.1	0	0.0	0	0.0
Biotechnology	0	0.0	0	0.0	0	0.0	0	0.0
Medical/Health-related	27 082	4.6	2	4.2	4 770	0.8	1	2.9
Energy	30 419	5.2	1	2.1	16 626	2.8	1	2.9
Consumer-related	148 959	25.4	7	14.6	23 835	4.0	5	14.7
Industrial Products and Services	0	0.0	0	0.0	943	0.2	2	5.9
Chemicals and Materials	7 826	1.3	1	2.1	10 202	1.7	6	17.6
Industrial Automation	0	0.0	0	0.0	0	0.0	0	0.0
Other Manufacturing	17 247	2.9	6	12.5	77 790	13.2	2	5.9
Transportation	5 425	0.9	1	2.1	4 285	0.7	1	2.9
Financial Services	138 605	23.7	5	10.4	97 767	16.6	7	20.6
Other Services	6 388	1.1	1	2.1	48 600	8.2	1	2.9
Agriculture	150	0.0	1	2.1	2 367	0.4	1	2.9
Construction	8 780	1.5	4	8.3	103 067	17.5	1	2.9
Other	13 581	2.3	4	8.3	0	0.0	0	0.0
Total Investment	585 561	100.0	48	100.0	589 558	100.0	34	100.0
Subtotal High-Tech	181 105	30.9	15	31.3	199 306	33.8	6	17.6

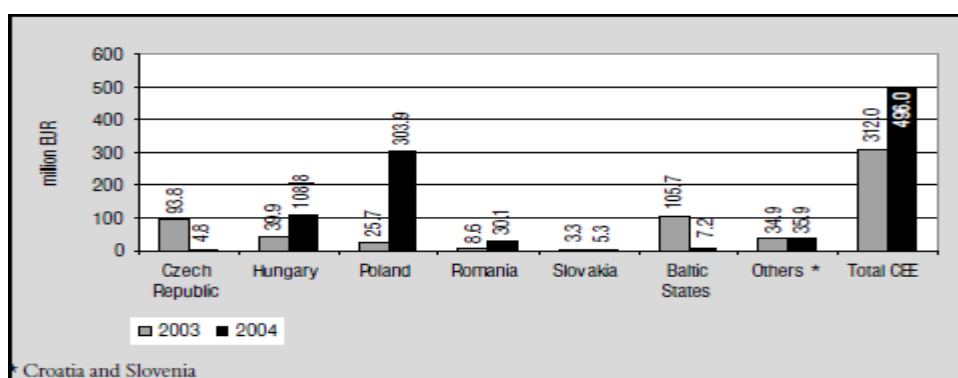
Source: PPEA (2005)

2.4.4. Poland and other VC markets

Most literature that was consulted compared the Polish market to the other countries falling within the Central and Eastern Europe(CEE)⁵ region as they claimed that the structure of funding in the CEE differed from that in most of the European countries. However, with Poland having joined the EU comparison to other European countries is crucial and necessary to ensure that its PE/VC market grows to the levels of the more successful European markets. In the top 30 ranking of aggregate deal value in 2010 by SAVCA Poland ranked 23rd with \$1.3 billion, the UK 2nd with \$31 008 billion.

Figure 8 below shows that in 2004, private equity funds operating in the CEE region raised EUR 496 million, a 60% increase over the 2003 level of EUR 312 million. The vast majority of this (83%) was raised by fund managers from two countries, Poland (61%) and Hungary (22%), primarily for investing in the whole region. Non-domestic investors represented 85% of the total capital raised in 2004. Only 15% of funds were sourced locally, while in Poland the share of domestic investors was negligible, at below 1%. For comparison, in Europe as a whole as much as 57% of funding came from local sources (PPEA, 2005).

Figure 9: Fundraising for CEE Private Equity



Source: PPEA (2005)

⁵countries that make up the region - Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Lithuania, Latvia, Poland, Romania, Slovakia, Slovenia

Other studies that review a comparison of the Polish VC markets with emerging economies are Ribeiro and Carvalho (2008) who do a comparison with Brazil, their findings show that Poland historically performed better than Brazil in raising VC funds, Salehizadeh(2004) also performs an empirical analysis of a group of emerging economies including China, South Africa, Poland, Israel, India etc.

2.4.5. The Polish VC Market and economic development

The Polish economy is a transition economy that is in a long-term process to establish a free-market system through privatisation of SOEs, establishing more businesses and fostering relationships with foreign partners. Poland's history under a communist regime which constrained entrepreneurship meant that VCs inherited a country with an under developed entrepreneurial sector (Klonowski, 2005).

According to Bliss (1999) SOEs are characterised by unproductive assets, heavy debts and over employment. While the general consensus is that entrepreneurship leads to employment which in turn leads to economic development to turn around ailing SOEs many VCs have had to get rid of unproductive assets and employees thus indirectly increasing unemployment. The most notable contribution of VC to development in Poland is the development of financial markets and liquid exchanges (Klonowski, 2005). With the development of financial markets the entrepreneurial sector has found itself having to contend with international institutional standards thus forcing more change to take place.

According to Bliss (1999) in 1994 only 10 VCs operated on Poland, most of the deals concluded were in the expansion stage and none of them involved high technology. Since then a lot has changed in the Polish VC industry, in 2011 Poland was the second largest CEE venture market with €27m invested, an increase of more than 9 times the 2010 level, and

accounting for 28% of the regional total (EVCA, 2012). By 2011 Poland had 27 VCs second only to Hungary's 29 in the CEE region. The growth in amounts invested particularly in the start-up stage which grew year-on-year by 85% in amount and 76% in number of companies' shows that a culture of innovation and entrepreneurship is thriving in Poland and more employment is being created which impacts positively on economic development (EVCA,2012).

Another huge development was that by sector, computer and consumer electronics received the most venture capital investments in CEE in 2011 with approximately €42m invested across 29 companies. The communications sector has also consistently since 2007 had the largest number of venture-financed companies in CEE, and remained at the top of the list in 2011 with 29 companies (EVCA, 2012). This is a huge leap from the 1994 scenario where none of the investments made that year were in high technology (Bliss, 1999). Consumer goods and retail, energy and environment, real estate, financial services, business and industrial products and life sciences were the other sectors of choice for most VCs (EVCA, 2012).

No data was found in the public domain which explicitly showed the employment (number of employees) created by the 27 VCs that were active. This thus limited the scope of the research as no clear growth pattern between the VCs and employment and thus development could be established.

2.4.6. Key Challenges to the growth of the Polish VC Market

The Polish market is characterised by the following according to Klonowski (2005, 2006a, 2006b);

- Communist regime restricted entrepreneurs to a small geographic market and product or service range before 1990 resulting in the current under developed entrepreneurial tradition.
- Most Polish businesses were set up in the early 1990s.
- Local businesses are small and rarely prepare formal budgets, business plans and financial forecasts.
- VCs battle with getting reliable financial information and must focus on monitoring financial performance as a priority adding to the cost of the transaction.
- Entrepreneurs have limited knowledge and understanding of venture capitalism resulting in the VC having to take on the role of negotiators and educators.
- Entrepreneurs have negative behavioural patterns such as off-balance sheet transacting, using company assets for personal reasons, appointing unqualified family members and friends to management positions etc.
- Deal completion takes a much longer period because of the market conditions and many lead to deal fatigue and uncompleted transactions.
- Legal framework not supportive of the VC industry
- The Commercial code is ill-suited for structuring VC transactions as it doesn't account for convertible securities and doesn't allow these even though they are crucial for VC deals.
- The Investment Fund Act that was intended to positively influence VC activities is more suited to pension and publicly quoted funds and not Venture Capitalists in reality.

- Capital gains taxed at same rate as ordinary income, a reform may encourage investment.
- Problems with tax interpretation and collection
- The Warsaw Stock Exchange is liquid
- Secondary market is also established for fundraising and exits.
- The dominant exit mechanism is however trade sales

As much as most literature sees trade sales as the dominant exit mechanism for the Polish market recent data on the entire CEE shows that in 2011 Two IPOs accounted for about 38% of venture divestments at cost, trade sales represented one third of companies exited and made up almost one quarter of the divestment amount, repayment of principal loans represented close to 20% of divestment activity, both in terms of number of companies exited and amount (EVCA,2012).

It is clear from the list above that like many emerging markets corporate governance and institutionalization is an issue for VC sector growth in Poland. Because of the underdeveloped entrepreneurial culture the universities are not producing valuable IP through research or largely innovative students. Just as in South Africa the VC sector is very small with most funds preferring to invest in later stages, most entrepreneurs are not familiar with the role of VCs and in both countries VCs need to educate entrepreneurs about their role in the economy. The Johannesburg Stock Exchange (JSE) and the WSE are well established, liquid and advanced markets thus making it easier for firms to fundraise and exit transactions. Both the SA and Polish governments can introduce more incentives to draw funds into early stage ventures. Legislation and regulations still hinder the growth of the VC markets in both countries examples are the commercial code in Poland and exchange controls in South Africa.

3. RESEARCH METHODOLOGY

The nature of the research is largely qualitative but data to be used for comparison purposes such as country population and size of GDP, number of participants in each country's PE/VC market, the size of funds under management and investments made is quantitative. To achieve the aims of the research a research methodology of secondary and primary data gathering was selected. To determine similarities and differences between the two markets a longitudinal analysis will be employed from data collected from a selected sample of VCs through questionnaires and semi-structured interviews.

3.1. Research Approach and Strategy

The main purpose of this research is to provide a descriptive and interpretational analysis of the data collected. Descriptive Analysis: reveals the nature of certain situations, relationships, processes and systems. Interpretative Analysis: enables the researcher to gain insights about the research area, develop new concepts or theoretical perspectives or discover more problems that exist within the research area.

The main objective of the study which is to determine if emerging country VC markets have any similarities and differences and if they have adopted the American VC model clearly points to the interpretative element and of the research. More relevant questions have come out of the research such as the likely impact of the lack of VC market activity on the future later stage markets. It has become apparent that by not investing adequately in early stage markets there will not be enough later stage firms to invest in, in the future.

3.2. Data Collection, Frequency and Choice of Data

3.2.1. Secondary data

Secondary data was obtained from scholarly periodicals, brochures and annual reports of the sampled VCs and the internet were consulted for the literature study and the process of identifying VCs in South Africa and Poland.

3.2.2. Primary data

The only sources of primary data consulted in this research are the semi-structured interviews that were conducted with the sampled VCs.

3.2.3. Data Collection

Semi-structured interviews were held in Durban and Johannesburg with the respondents over a period of five days. This method was chosen due to its ability to provide in-depth information that can be used for future studies as the VC sector in South Africa is a new asset class and field of study. Semi structured interviews also provided the platform to discuss questions for further clarity.

The interviews were conducted at the offices of each respondent. The respondents were emailed and called three weeks before the interviews to inform them of the research and purpose of the interview and arrange for a suitable interview date and time. Five days before the interviews respondents were contacted again to confirm attendance and availability. A copy of the questionnaire was emailed to the respondents two days before the interviews. The interviews took an hour and thirty minutes on average.

Data was captured by taking interview notes on separate templates resembling the questionnaires for all respondents. At the end of the sessions respondents who had filled in the questionnaires before the interviews also supplied these. During the sessions respondents verified responses captured and these were then summarised for data analysis. The respondents answered all of the questions in the survey and did not see any of them as being detrimental to their competitive advantage in the industry.

3.3. Sampling

The VC universe in South Africa was limited to the members of the SAVCA. From the literature review suitable VC firms were identified. Of the firms contacted six agreed to the interviews. The VCs were interviewed over a period of five days.

TABLE: 1 Sample Size

Name of Respondent	Year of fund formation	Years in operation
Business Partners Limited	1981	32
IDC-Venture Capital SBU	2007	6
Capricorn Capital partners	2003	10
Treacle Private Equity	2000	12
National Empowerment Fund: Strategic Projects Fund	2008	5
RMB Ventures SA	1994	18

3.4 Data Analysis Methods.

The research method employed is largely qualitative due to facts discussed above with a few quantitative points. A longitudinal analysis was conducted to supplement the descriptive and interpretative analysis.

3.5. Limitations

The first limitation is the use of the Southern African Venture Capital and Private Equity Association (SAVCA) members with early stage investments as the SA Venture Capital universe and the members of the Polish Private Equity Association as the Polish VC universe. The second limitation is that the research is limited to data that is freely available on the PE/VC markets of the chosen countries and the scope mentioned in the research questions above. Thirdly due to the small sample size and nature and purpose of the report more sophisticated statistical analysis of the data gathered was deemed unnecessary.

4. RESEARCH FINDINGS, ANALYSIS AND DISCUSSIONS

An analysis of the findings from the semi-structured interviews is set out in this section.

The analysis presents what key role players in the South African Venture Capital sector view as characterising the emerging country VC sector.

The analysis encompasses company specific details such as sector focus and range of investment size in Section A of the questionnaire. Section B encompasses how VC view South African Entrepreneurs, the Government, regulations and the more general VC sector. The last section, Section C resents the link between VC and development.

4.1. The Venture Capitalists

The South African Venture Capital universe was limited to the members of the South African Venture Capital and Private Equity Association (SAVCA). Eighteen firms that participate in early stage funding were contacted. Of the 18 firms 6 were available for being interviewed, see participants in Appendix 1.

4.1.1 Background of the Venture Capitalists interviewed

All the respondents have been in operation for over 10 years with the exception of the IDC and the NEFs Strategic Projects Fund (SPF) with 6 and 5 years in operation respectively. This indicates that South Africa has a fairly developed VC sector with all but one respondent having had at least one exit to date.

4.1.2. Source and structure of the fund

Of all the funds interviewed none of them was structured as a limited liability partnership. Four of the firms were privately funded with two being captive funds. The remaining two were DFIs. The IDC's Venture Capital SBU however got its funds allocation from the broader IDC and could be viewed as being self-funded to some degree.

TABLE 2: Source of funds

Private	DFI/ Govt
4	2

(a) Business Partners Ltd

Business Partners Ltd is an SME risk finance provider. In 2012 Business Partners Limited launched a R400 Million Business Partners Limited Venture Fund (BPL Venture Fund). The fund is 100% private and fully owned and controlled by the business. There is no general and limited partner structure. The BPL Venture Fund is aimed at financing high impact entrepreneurs with the potential to reach blue sky. The BPL Venture Fund has a five year time frame in which to invest the R400 Million. The company does not only invest in South Africa but has invested in Madagascar, Kenya and Rwanda. The new fund targets SME investment in Namibia, Zimbabwe, Zambia and Malawi. BPL also participates in syndicated funding but with exceptions.

(b) IDC: Venture Capital SBU

The IDC's venture Capital SBU gets a 100% of its funds through an allocation from the IDC. The VC SBU is currently working with a R500 Million VC fund to be invested over 5 years. The VC SBU does not participate in syndicated funding and only invests in South African businesses.

(c) Capricorn Capital Partners (Pty) Ltd

Capricorn Capital Partners is a 100% privately-owned. The fund is a captive private equity house within the Hollard Insurance Group. Capricorn is also associated with Capricorn Ventures International. Capricorn Capital Partners has invested R430 Million with a 7 to 10 year value creation cycle. The fund has a South African Focus but a continental foot print via its portfolios.

(d) Treacle Private Equity (Pty) Ltd: Treacle Fund II Trust

Treacle is a specialist Venture Capital and Private Equity business focused on the technology sector. The fund is a 100% privately owned. Treacle Fund II is worth R463 Million and was raised in 2005.

(e) RMB Ventures S.A

RMB Ventures is a subsidiary of FirstRand Limited and an on-balance sheet provider of private equity capital. The fund is 100% private. RMB Ventures has a current portfolio of

R2.5 Billion. The fund participates in syndicated funding and has an average investment / value creation term of 6.5 years. The fund focuses its investments on Southern Africa.

(f) National Empowerment Fund: Strategic Projects fund

The SPF is funded by the Department of Trade and Industry. The fund is worth R800 Million but has invested about R560 Million to date. The fund participates in syndicated funding and only invests in South Africa. The average investment period is 7 years but depending on the social impact of the project this might be longer.

4.1.3. Sector Focus

TABLE 3: Sector Focus

Sectors	included	excluded
Information and Communication Technologies	5	1
Real Estate	2	4
Infrastructure/ construction (telecoms infrastructure)	4	2
Mining (Primary, services and supplies)	4	2
Energy, clean energy	5	1
Financial services	4	2
Biotechnology	5	1
Medical/ health related	5	1
Industrial products and services	6	0
Manufacturing	6	0
Transportation	4	2
Agriculture, Agro-processing	5	1
Consumer related/ retail	4	2
On-lending	2	4
Tourism	1	5

The table above shows the sectors that the respondents indicated as participating in. All participants participate in the industrial services and products sector as well as the

manufacturing sector. Information and Communication Technologies, clean energy and energy, medical and agro processing were the second most common sectors with five respondents participating in these sectors. None of the respondents participate in primary agriculture and mining. Only two respondents participate in on-lending that being Business Partners Limited and Capricorn Capital Partners. The research findings supported the notion that VCs primarily invest in ICT, biotech and clean energy.

4.1.4. Stage of Investment

TABLE 4: stages of firm investments

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Seed: Research, Scoping and concept study, Pre- feasibility study and concept development	Start up and early stage: new set up or 1-3years in operation	Early stage expansion and development capital: breaking even or profitable entity.	Later stage development capital/ Growth capital.	Pre-listing Development capital	Initial Public Offering
Number of Participating firms per stage					
2	5	5	4	2	2

Of all the firms interviewed only two invest in the seed stage, IDC and NEF. The IDC, however, only considers globally unique technologies with a technology prototype and does not just invest in ideas. The NEF operates differently as they have come up with concepts in-house and invest in scoping and concept studies and pre-feasibility studies. Only two of the firms interviewed had prior exits through IPOs, the rest had exits through strategic sales. These findings are in line with the SAVCA and Venture Solutions (2012) survey findings that strategic sales are the predominant exit strategy in South Africa. All of the firms interviewed noted that most of the funding would start in stage 2 and the later stages would be as a result of new rounds of financing of the same project.

4.1.5. Range of investment size in stages

How much each of the firms interviewed invests is governed by a number of conditions. For one respondent the rule was to invest only 5% of his balance sheet, another respondent could only invest R10 Million in the first round, another respondent had a maximum of R15 Million in the first round and a limit of R40 Million per venture. For another respondent not more than 15% of the committed capital could be invested in start-up companies and no one investment could exceed 20% of committed capital. For most respondents the maximum amounts invested per venture could be increased depending on the benefits that the investment is likely to yield.

The IDC and NEF because of their developmental mandate looked at investments differently. These firms would make investments over and above stipulated maximums if the investment was deemed beneficial to the country. The limits per stage could also overlap depending on the rounds of financing needed by the business and the DFIs' growing share in the business as a result of the subsequent rounds. For Capricorn Capital Partners investments that were above the R50 Mio threshold were syndicated. Business Partners Limited has a R10 Mio

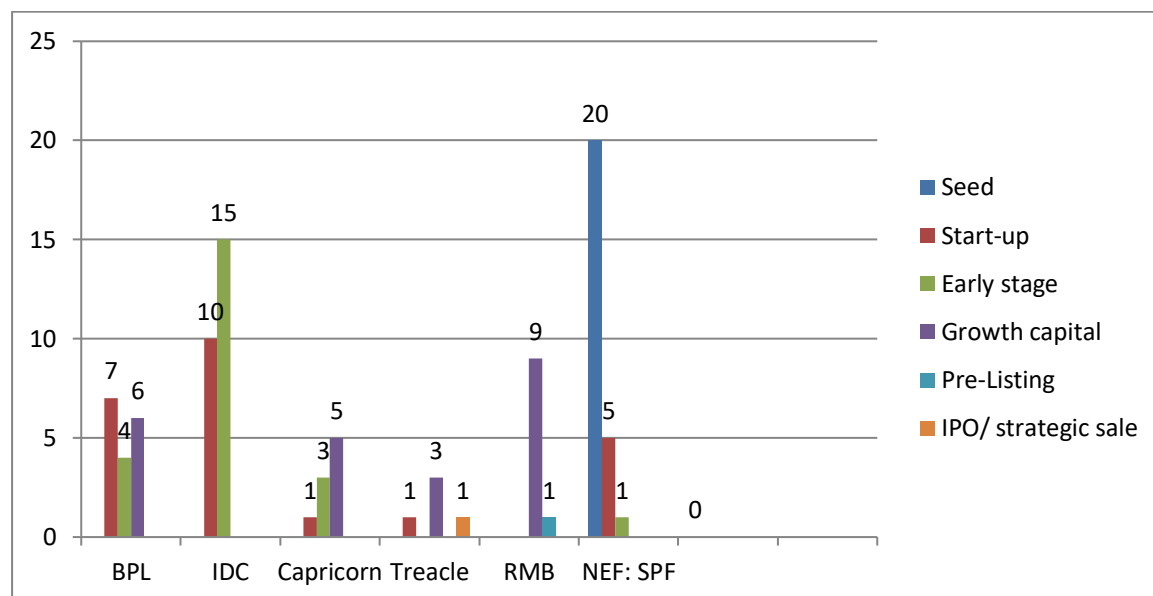
maximum investment per stage but its new technology fund has a Technical Assistance Facility worth US\$ 1 Mio which means that the investment per stage increases as more technical assistance is supplied. The Technical Assistance Facility will run parallel with the investments and ensure that investee companies receive management assistance, business building and value-add. While most VCs provide value-add services most of them are not formalised or allocated a different fund as is the case with BPL.

TABLE 5: Min and Max investments per firm, per stage

Stages	BPL		IDC		Capricorn		Treacle		RMB		NEF	
	Min	Max	Min	Max	Min	Max		Min	Max	Min	Max	Min
Seed	Nil	Nil	R1.5 Mio	R8.5 Mio	Nil	Nil	Nil	Nil			R3 Mio	R10 Mio
Start up	R500 000	R10 Mio	R1.5 Mio	R40 Mio	R5 Mio	R10 Mio	>R5 Mio	R69 Mio			R10 Mio	R50 Mio
Early stage	R500 000	R10 Mio	R1.5 Mio	R12 Mio	R5 Mio	R10 Mio	>R5 Mio	R92 Mio			R20 Mio	R75 0 Mio
Growth capital	R500 000	R10 Mio			R20 Mio	R50 Mio	>R5 Mio	R92 Mio	R25 Mio	R80 Mio		
Pre-listing							>R5 Mio	R92 Mio	R80 Mio	R400 Mio		
IPO							>R5 Mio	R92 Mio	R400 Mio	R750 Mio		

4.1.6. Number of current investments per stage

Figure 9: Current investments



Source: Interviews

While two respondents indicated that they invest in the seed stage, only one has current investments in that stage. From the chart above it is evident that the NEFs Strategic projects Fund (SPF) and the IDCs' Venture Capital Business unit have the most number of investments in the early stages currently in the group sampled. This is indicative of the big role that government is playing in the SME sector and the early stages of firm development. BPL notably also has a significant number of investments in the start-up stage which is in line with its investment philosophy.

While the number of investments that the other respondents have is lower the value in some instances is a lot higher per venture than those made by the government. An example is that of Treacle funded Teraco Data Environment (Pty) Ltd. Treacle's investment in Teraco Data Environment (Pty) Ltd is at R81 Mio to date, the fund initially invested R15 Mio when the firm approached it for start-up financing and provided two additional rounds of financing

when the company moved from the start-up to the early stage and then the growth/ later development stage. Treacle was also the only fund with an investment at IPO stage and RMB the only fund with an investment at pre-listing stage.

4.1.7. Summary of Respondents' profiles

This section on the background of the respondents has yielded the following results;

- a) All of the firms have been in existence for over five years with the average being 14 years.
- b) None of them have the traditional VC limited partnership structure.
- c) None of the respondents are traditional VCs as some also invest in equity, are captive funds and don't raise funds externally.
- d) Most of the funds are a 100% privately owned and this means that there is no general and limited partner structure and the ensuing conflicts.
- e) All but one of the respondents participate in syndicated funding.
- f) All of the funds have a South African investment focus but a continental footprint is evident.
- g) The average value or size of the funds is R400 Million.
- h) All of the funds interviewed play mentoring, monitoring and guiding roles in the firms that they invest in.
- i) The funds all aim for minority stakes in their investments between 25% and 50% less one share. The stakes that the companies have however have increased in the past due to subsequent rounds of financing resulting in the firms having majority stakes which are not ideal for them because they give the entrepreneur less of an incentive to work harder.

- j) The respondents invest in an array of sectors and some of them are not the typical high growth sectors that traditional VCs invest in.
- k) All the respondents don't invest in the seed stage except for the government backed VCs which require a working technology prototype.
- l) Start-ups with between one and three years in operation and early stage development and expansion capital to take firms up to break-even point were the most common investments for VCs.
- m) The minimum that the respondents invested was R500 000 and the maximum was R750 Mio. The average investment per venture was R10.5 Mio.
- n) The most predominant exit strategy was through strategic sales post the growth capital stage, IPO exits were not the norm with only two respondents out of the six having exited investments through IPOs.
- o) All the respondents would exit investments between year seven and ten.
- p) All of the respondents noted that they invest in start-ups and the following stages only happen when subsequent rounds of financing are needed.
- q) All but one of the firms interviewed had investments in the start-up stage.
- r) There were a total of 20 seed stage investments, 24 start-up investments, 23 early stage investments, 23 Growth capital investments, 1 pre-listing and 1 IPO stage current investment in the sample. If the NEF did not have any current investments in the seed stage there would be no activity in that stage from the firms sampled. Start-up, early stage and current growth capital investments seem to be evenly spread with no one stage having a majority of the investments.

4.2. Emerging market VC characteristics

The most common emerging market VC characteristics data was collected under three subsections namely, entrepreneurs, government, regulations and general. A synopsis of emerging market VC characteristics from the Asian and Polish markets as well as the more advanced Silicone Valley model was made in the literature review and questions for the questionnaire were compiled based on these characteristics.

4.2.1 Entrepreneurs

TABLE 6: Characteristics of emerging market entrepreneurs

	YES	NO	Undecided
1. Does South Africa have a strong culture of entrepreneurship?	2	4	
2. Is a strong R&D culture into IT, medical and bio-technology fields especially in universities or national labs prevalent in S.A?	2	3	1
3. Are there enough entrepreneurs venturing into the high risk, high reward sectors that are most attractive to venture capitalists?	2	4	-
4. Are the entrepreneurs aware of venture capitalists and their role?	1	5	-
5. Do VCs battle with getting reliable financial information?	5	1	-
6. Are local businesses small and	6		

do they rarely prepare formal budgets, business plans and financial forecasts?	YES	NO	Undecided
7. Are South African entrepreneurs adhering to international standards of financial reporting?	1	5	
8. Is performing due diligence and determining the viability of proposed investments on South African entrepreneurs a more lengthy and strenuous process compared to developed economies (USA)?	3	2	1
9. Is there a prevalence of conflicting goals between the entrepreneurs and the venture capitalist?	6		

The majority of the respondents (67%) believed that South Africa did not have a strong culture of entrepreneurship. Most of the respondents believed that small business ownership which was predominant in South Africa's informal sector could not be classified as entrepreneurship. The two respondents who viewed South Africa as having a strong culture of entrepreneurship based their argument on the fact that they were never short of applications for funding from SMEs and the fact that they never had enough funds for all the

great projects that they were presented with. These respondents also noted that they did not have to constantly look for good projects to invest in as entrepreneurs would seek them first.

Three out of the six respondents believed that South African universities and research councils don't have a strong R&D culture. Other respondents such as the IDC and BPL acknowledged the role and emergence of innovative platforms such as the Technology and Innovation Agency (TIA), Stellenbosch University's InnovUs which is the university's technology transfer company, Pretoria University's Urban Innovation hub and the CSIR. InnovUs manages the commercialisation of Stellenbosch University's innovation and intellectual property portfolio through patenting, licensing and the formation of spin-out companies (www.innovus.co.za). One respondent however felt that the efforts of universities, research councils and government entities such as the Department of Higher Education and DFIs should be better coordinated and streamlined to produce commercially viable intellectual property.

Five of the respondents agreed that South African entrepreneurs were not aware of the role of VCs and four agreed that there were not enough entrepreneurs venturing into the high risk, high reward sectors that are most attractive to venture capitalists. What most respondents found was that the majority of South African entrepreneurs were only aware of debt financing and that is what they would always seek, not equity or convertible instruments of financing their ventures. The respondents agreed that as the VC sector grew and more success stories were communicated in mainstream media more entrepreneurs would become aware of their role.

Getting reliable, well presented financial information was a challenge for all the firms interviewed. In some instances SMEs would present the right information but in the wrong format for the investors, secondly most innovators are not business people and most small

businesses are run by one person who handles all aspects of the business from sourcing, marketing to financial reporting and in most cases with no financial background. Many investors are interested in economic drivers and not accounting drivers and many entrepreneurs had to be taught to present information this way. All respondents agreed that once they were involved in the businesses, financial reporting would improve and the entrepreneurs were willing to adopt the changes for the long term.

All the respondents agreed that performing due diligence on start-ups was a strenuous task. They however could not agree whether it would be easier to perform due diligence in developed economies as they had not done business there in the past. The firms interviewed had dedicated teams of experienced deal makers to perform due diligence thus making the process less strenuous and lengthy.

All six of the respondents agreed that conflicting roles between entrepreneurs and investors were common. Venture Capital and Private Equity firms stay invested in certain ventures for a predetermined time frame with a certain exit. The main objective of these firms is to add value to the investee firm, grow the enterprise and then harvest their investment. Entrepreneurs tend to have sentimental attachments to the firm and these tend to interfere with the investors' profit motive.

Four of the respondents answered "no" when asked if South African entrepreneurs exhibit negative behaviour patterns. Capricorn Capital Partners said they had not experienced any negative behaviour patterns from entrepreneurs that they had dealt with and attributed this to the on-going monitoring that they do on their investments. The IDC had only had one negative occurrence in this regard and Treacle Private Equity (Pty) Ltd and RMB Ventures said that they had not experienced these because of the strong corporate governance systems that they put in place prior to investing and formalizing the businesses without limiting the

entrepreneurial nature of the investee firm. The NEF and BPL said some South African entrepreneurs do exhibit negative behaviour patterns; they attributed this to entrepreneurs wanting instant gratification and not being patient with their businesses so that they can reap greater rewards in later stages.

4.2.2. Government

TABLE 7: The government's role in the VC sector

10. What role do you see government playing in the VC sector (Interventionist or enabler)?	Interventionist 1	Enabler 2	Both 3
11. Is government doing enough as an enabler to spur on the growth of the industry?	Yes	NO 6	Undecided
12. Are government institutions such as research councils, universities etc. producing IP (Intellectual property) that is commercially exploitable?	Yes 2	No 4	Undecided
13. Has the government increased its spending on R&D to the benefit of the VC sector?	Yes 2	No 2	Undecided 2

Half of the respondents (50%) saw government as playing both an interventionist and an enabling role. The IDC, TIA and NEF were seen as playing an interventionist role and most respondents felt that this could be done a lot more. Capricorn Capital Partners (Pty) Ltd noted the important role that the IDC and NEF had played in their transactions in terms of syndication, because of these entities the firm was able to be a part of bigger transactions than its fund allowed. The DTI was also found to be doing great interventionist and enabling work notably with its programs in the manufacturing sector. The respondents agreed that these government backed entities leveraged their position in transactions. All the respondents agreed that the government could play a better role by giving tax incentives to early stage investors, promoting a culture of entrepreneurship in South Africa and identifying focus areas for economic activity in the country.

All of the respondents felt that the government was doing something but not enough to spur on the growth of the VC and PE sectors. Four of the respondents did not think that government institutions were producing IP that is commercially viable. Most of the respondents were not aware of any successful projects that stem from the commercialisation of IP from universities, CSIR, the Urban Innovation Hub or TIA. The IDC and BPL were the only two respondents that new of and had invested in commercially viable IP from universities and research councils.

The respondents' views were evenly split for the last question in the government subsection on whether the government increased its spending on R& D to the benefit of the VC sector. Capricorn Capital Partners (PTY) Ltd and RMB Ventures were undecided; Treacle Private Equity (Pty) Ltd did not view spending on R&D as a government priority government as having or even a space for government to intervene in, BPL also did not see increased spending on R&D by the government as having been beneficial to the VC sector to date. The IDC and NEF viewed government as having increased spending on R&D to the benefit of the

VC sector but also noted that more still needed to be done and that a more coordinated effort would yield better results.

4.2.3. Regulations

TABLE 8: Regulations and the VC sector in South Africa

	YES	NO	Not applicable
1. Are current regulations conducive to the growth of the VC sector in S.A?	1	5	
2. Have the exchange controls in relation to IP negatively affected your firm? E.g. new medical devices	1	4	1
3. Can restructuring Capital gains taxes for early stage investments be viewed as an incentive for investors?	1		5
4. Is the South African market characterised by relationship based, network-centred structures and not a rule-based, impersonal exchange system?	6		
5. Do you view current accounting standards as beneficial and enforceable?	6		
6. Is the South African labour market well regulated and conducive		5	1

to the growth of the South African VC sector?			
7. Are corporate governance regulations weak and generally unenforceable?		6	
8. Is the South African economy characterised by ill-defined property rights?		6	
9. Is there a lack of intellectual property protection?		6	

On overall the respondents agreed that the South African VC and PE sectors were well regulated. Five of the respondents said that current regulations at the time of the interviews were not conducive to the growth of the VC sector. Since then changes were made to regulation 28 of the Pension Funds Act of South Africa encouraging investors and notably smaller pension funds to invest in private equity, this would result in easier fundraising.

Four of the respondents have never had negative experiences with exchange controls in relation to IP. Because of restrictions on dealings with foreign firms one of the respondents has had to exit an investment before real growth was achieved.

Most of the respondents did not view Capital gains Taxes as a hindrance to the growth of the VC sector. Even if CGTs for early stage investments were to be made substantially lower than those paid on later stage investments this would not affect investors' decisions to invest in early stage developments.

All of the respondents agreed that the South African VC market is characterised by relationship based, network-centred structures and not a rule-based, impersonal exchange system. All of the respondents had gotten their best deals through their personal networks. The South African VC community is very tightknit and the PE community is also the same.

All the respondents view South African accounting standards as beneficial, credible and enforceable. The respondents did not view the country as having any institutional issue in this regard.

Five of the respondent did not view the South African labour market as well regulated and conducive to the growth of the South African VC sector. While noting that most early stage investments start with one or two entrepreneurs when the business grows and requires more employees labour regulation become a big issue. Because VCs focus on technology fields most admitted that mechanisation was a more favourable option because of the red tape and instability in South Africa's labour markets where strikes and wage hikes have become common place. Others also noted that with SMEs one needs employees that are dedicated and maximise company resources, labour legislation is so onerous that it makes it impossible to dismiss people that are visibly wasting company resources and not producing results.

All of the respondents agreed that South Africa had a good stance on corporate governance, well defined property rights and very effective intellectual property protection. All the respondents agreed that South Africa has a well-developed institutional environment with a bit of over regulation in certain sectors.

The last question in this subsection was to ascertain if the law has been an impediment to any of the sampled firms' transactions. Half of the respondents (50%) had experienced red tape in order to bring certain products to market thus increasing the period of time that certain transactions take to put together. Regulated industries such as the medical field have so much

red tape that it can take up to 10 years to bring a product to market. Biotechnologies were another sector that proved to have challenging regulations for investors. One respondent noted the departments of energy and environmental affairs as having many processes and sometimes conflicting requirements which add to the complexity of certain transactions. The remaining 50% of respondents had not had any transactions being impeded or drawn-out by the law.

4.2.4. General

The general subsection consisted of open ended questions that addressed issues that do not fall into the prior subsections.

All six respondents agreed that there was a lack of well-educated professional managers with the required expertise in the VC sector. Most VC managers in the South African VC sector had not completed a VC cycle and most had experiences of strategic sales and not IPO exits.

All of the firms interviewed preferred non-controlling stakes in investee firms. The government backed VCs were governed treasury rules that they ought to have a maximum shareholding of 49.9% in investee firms. Any agreement that would require shareholding above 49.9% was subject to treasury approval or other instruments such as quasi or convertible loans and a revolving credit facility were used.

All of the sampled firms agreed that strategic sales were the most common exit strategy. In South Africa returns between 20 and 25% are considered good returns according to the majority of the respondents. While most VCs like the IDCs' VC SBU have a prerequisite real after tax Internal Rate of Return (IRR) above 30% this rate is normally achieved by one out

of ten investments. While PE firms historically target returns around 25% to 35%, VCs target returns are usually five to ten times the investment given the nature of the risk according to Treacle Private Equity (Pty) Ltd which operates in both sectors.

The average IRR for the sampled firms for exited funds is 30%. Investments however differ extremely with one respondent having had IRRs of 208%, 100%, 51% and 45% from investments in its first fund. The fact that the sampled firms don't only invest in traditional VC sectors dilutes the outcome of the average IRR.

All respondents agreed that there wasn't enough financing of good projects in initial stages but were adamant that the market will correct itself. All the respondents agreed that South Africa had sound monetary and fiscal policies, stable inflation but an unstable currency. The majority of the respondents viewed these factors as immaterial to the growth of a nascent VC sector.

4.3. Venture Capital and Development

This section of the questionnaire aims to establish the link between VC activity and development through employment growth data.

Four of the firms interviewed viewed development as a by-product of driving entrepreneurship and not one of their mandates. Only the two government backed VCs had development as a mandate, for all the other respondents returns drove their choices.

TABLE 9: Number of firms invested in since inception

Name of Respondent	Number of firms
Business Partners Limited	60
IDC-Venture Capital SBU	30
Capricorn Capital partners	15
Treacle Private Equity	8
National Empowerment Fund: Strategic Projects Fund	30
RMB Ventures SA	n/a

BPL is the oldest of the firms interviewed and has the most number of firms invested in since launch. The IDC and NEF while relatively new in the VC space have 30 investees each which is half of what BPL has achieved in 32 years within a third of the time.

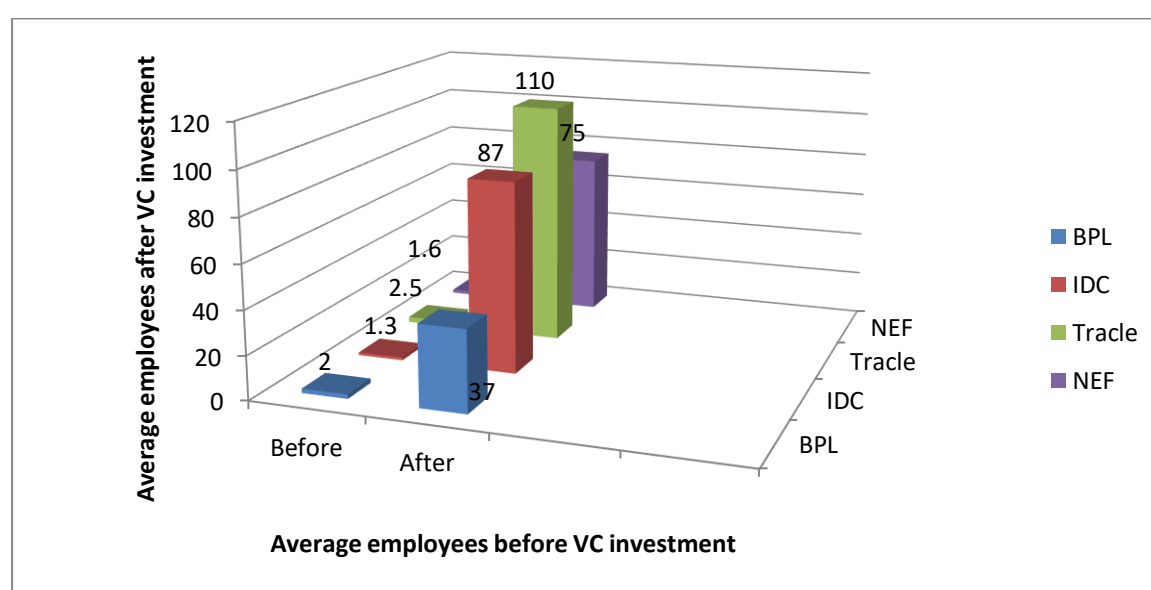
TABLE 10: Employment opportunities per VCs' transactions

		FIRM A	FIRM B	FIRM C	Averages
BPL	Before VC	1	3	2	2
	After VC	14	74	24	37
IDC-Venture Capital SBU	Before VC	1	1	2	1.3
	After VC	110	100	50	87
Treacle PE	Before VC	2	3		2.5
	After VC	120	100		110
NEF: SPF	Before VC	0	4	1	1.6
	After VC	120	80	25	75

Table 10 above shows the exponential growth in employment that four of the respondents have experienced in their investee firms. All of the respondents said that their investments had resulted in employment growth and the list above indicates that. The table is also indicative of the fact that early stage firms have an average of two employees; the NEF however also initiates projects in house such as the one that started with a headcount of zero and had a headcount of 120 at exit. The highest increases in the number of employees in a venture post early stage investment was 120 people with the least being 13 people.

The average increase in employment per investor may be slightly skewed depending on the employment growth of the investments that the interviewees decided to share. It is important to note that some projects may not result in a lot of direct employment opportunities but may have spin outs that are labour intensive. One example is a specialist hospital chain that one of the respondents is involved in, the hospitals will not only create jobs for nurses and specialist doctors but for suppliers as well such as bed linen manufactures which are labour intensive and suppliers of cleaning services.

Figure 10: Employment growth



All the respondents were not actively involved in the communities in which they invest in the early stages; community involvement was a later stage initiative when the investee firm was profitable and self-sustaining.

All of the respondents were involved in continuous training and skills development mainly through the value add services that they provided to the investee firm. Only BPL had a formalised mentor program to up skill entrepreneurs, the other respondents did the same in an informal manner.

5. RESEARCH CONCLUSIONS

5.1. What characterised the early American VC model and can the model be adopted by emerging markets?

From the findings in the literature a number of factors characterise the American VC model such as Government support of the venture capital industry, Sound monetary and fiscal policies, stable inflation and currency and an Enabling regulatory framework (e.g. pension funds and capital gains tax). Secure property rights and a strong rule of law, good corporate governance and well regulated labour markets also characterise the Silicon Valley model. Specialised financial intermediaries for early stage investments (VCs) have long been established in America.

A strong R&D culture into IT, medical and bio-technology fields especially in universities or national labs as well as higher GDP growth and increases in R&D spending characterise the American VC model. Innovative, risk taking entrepreneurs with access to large sums of capital through the funded pension system, with risk-tolerant institutional investors are responsible for the growth of the Silicon Valley model.

VC has a sit or sits in the firm's board of directors to enable the GP to be actively involved in the business, monitoring, mentoring and setting up new networks, this is a fundamental to the operation of VCs all around the world. In America convertibles are used frequently and there is constant replacement of entrepreneurs as American VCs tend to hold majority stakes in the businesses that they invest in. Syndication is more prevalent in the US and US firms have better screening skills due to greater experience.

Strictly regulated, liquid and transparent stock markets have aided the growth of the American VC sector. A vibrant IPO market which many argue could be a result, rather than a precursor of a strong VC industry characterises the Silicon Valley model.

The findings from the empirical research show that the government is taking initiatives to support the growth of the VC sector but all the interviewees agreed that more still needed to be done to move the VC sector from a nascent industry to a well-developed one or get it in par with South Africa's PE sector which all respondents viewed as developed. Similar to the American case there is government support of the VC sector in South Africa, Asia and Poland but more can be done in these emerging markets to trigger the growth and development of the sector.

From the findings all respondents viewed South Africa as having sound monetary and fiscal policies, stable inflation but an unstable currency. This characteristic is similar to that of the United States.

From the findings all the respondents viewed South Africa as having a regulatory framework that was on overall not prohibitive of the growth of the VC sector. Regulation 28 of the Pension Funds Act of South Africa was amended to attract smaller investors into the private equity sector and subsequently venture capital. The South African respondents did not view capital gains tax as having a substantial effect on the VC sector. With regards to regulation local VCs felt it was enabling.

All the firms interviewed agreed that South Africa had secure property rights, a strong rule of law, good corporate governance and well regulated labour markets with the majority finding

that the labour markets were perhaps too regulated. For any emerging market to function optimally these characteristics must be promoted.

According to the research South Africa has lower rates of innovative, risk taking entrepreneurs, a strong R&D culture into IT, medical and bio-technology fields especially in universities or national labs to produce commercially exploitable IP is not prevalent. While there is a formal VC sector in South Africa access to large sums of capital for small businesses is still limited. These characteristics are similar to those of the Asian and Polish emerging markets and improving them would result in growth of the VC sector.

In South Africa as in the American case VC has a sit or sits in the investee firm's board of directors to enable the investor firm to be actively involved in the business, monitoring, mentoring and setting up new networks. Poland has a similar structure but the Asian emerging VC market is characterised by family ownership of firms and smaller non influential stakes for VCs.

The Silicon Valley model is characterised by a frequent use of convertibles and the replacement of entrepreneurs; from the research findings South African VCs prefer to hold minority stakes in investee firms and the replacement of entrepreneurs is not prevalent. In Asia VCs also get minority stakes and in Poland the same is also true. Syndication is more prevalent in the US and research findings showed that in South Africa and Poland Syndication with government backed entities was more prevalent.

The American Silicon Valley model cannot in its pure form be adopted by emerging market VCs as these have differing institutional challenges. Characteristics that are crucial to the

development of nascent VC sectors should however be adopted; enabling regulation, limiting bureaucratic red tape and liquid transparent stock markets are characteristics that will attract investors to early stage investments as they have the potential to limit the risk inherent in early stages.

5.2. What are the key challenges that emerging country VCs face; lessons from Asia.

From the literature review findings and empirical research findings it is evident that the Asian VC market differs vastly from the South African and Polish VC markets. The institutional, ownership structures and property protection regulations are much stronger and developed in South Africa and Poland than is the case in Asia, this means that Asian economies have a unique set of challenges compared to other emerging markets. In Asia the governments are viewed as interventionists negatively so and not enablers, the South Africa research findings show that most VCs view the government as playing both a positive interventionist and enabler role and that it should put in more efforts in this regard.

From the empirical research the South African respondents agreed that the market was characterised by a strong reliance on social network ties just as in Asia, other similarities were a lack of well-educated professional managers with required expertise and experience. None of the respondents were the independent limited partnerships prevalent in the US.

5.3. Are there any similarities and differences between the South African and Polish VC markets?

The research findings from the VCs that participated in the interviews show many similarities between the Polish VC market and the South African Market.

All the respondents agreed that South African local businesses are small and rarely prepare formal budgets, business plans and financial forecasts this is also characteristic of Polish entrepreneurs. Another similarity is that VCs in both countries battle with getting reliable financial information and must focus on monitoring financial performance as a priority adding to the cost of the transaction.

In both Poland and South Africa research and findings prove that entrepreneurs have limited knowledge and understanding of venture capitalism resulting in the VC having to take on the role of negotiators and educators.

In Poland entrepreneurs have negative behavioural patterns such as off-balance sheet transacting, using company assets for personal reasons; appointing unqualified family members and friends to management positions etc. the majority of the respondents to the survey however saw no such behavioural traits in South African entrepreneurs with two out of the six respondents having experienced these.

Research findings prove that the dominant exit mechanism is trade sales in South Africa and this is also the dominant exit mechanism in Poland. While the number of IPOs has increased considerably over the years strategic sales have retained their dominant position.

The Polish VC market is characterised by a legal framework that is not supportive of its growth, this is not the case in South Africa as the findings show that the majority of the respondents viewed regulation as enforceable, protective of intellectual property and not a deterrent to their operations. Findings from the literature review show that Poland has problems with tax interpretation and collection; South African interviewees saw no major effect of taxes on their businesses.

5.4. What are the contributions of the South African and Polish VC markets to the economic development in the two countries?

From the research findings it is evident that successful VC transactions result in employment growth and the establishment of new industries. While some transactions may not be directly labour intensive they can have spin outs that create many job opportunities. In this regard VCs are crucial for economic development and spur on economic growth as well.

5.5. What are the key challenges to the growth of the South African and Polish VC markets?

Some of the key challenges are that the VC sectors are small, very networks driven and many entrepreneurs don't know about their existence or role as a venture financing option. For the sector to grow and attract more investment survey respondents

The two countries don't have a culture of entrepreneurship. The universities and research councils are not producing IP that is commercially exploitable and do not encourage the youth to think innovatively and be entrepreneurial.

Most business owners operate in the informal sector and tend to not have reliable financial information, do not present financial information professionally or have strategic direction for their firms. These issues make performing due diligence more onerous for VCs in these markets.

Legislation needs to encourage investment into independent VCs to enable fundraising to be easier. Most independent VCs fundraise internationally, legislation must be introduced so that local investors don't see the asset class as being too risky but see the growth opportunities and high rewards within the VC sector. Legislation that allows institutional investors such as pension funds and insurance companies to invest in privately held companies will spur on the growth of these emerging VC markets.

6. RECOMMENDATIONS FOR FUTURE RESEARCH

This report aimed to highlight the similarities, challenges and differences of emerging market VCs. From the research it was evident that Asian economies were more attractive to foreign VCs compared to South Africa and Poland. An area of further research would be to ascertain why this is the case when South Africa and Poland have better regulation and property rights protection compared to the Asian countries.

The venture capital sector in South Africa and Africa as a whole is not well researched. More research to educate entrepreneurs about what VCs look for in potential investee firms i.e. the selection criterion is crucial. Research into the marketing strategies of current VCs is another area for future research so as to answer the question why most entrepreneurs are not aware of VCs and using equity as a means to finance their ventures.

As the report has highlighted the challenges that emerging market VCs face an area of future research would be to show how venture capitalists in emerging markets deal with the challenges that they face. Another area of future research would be to answer the question of how to make VC an attractive, preferred asset class for investors.

REFERENCES

- Ahlstrom, D. Bruton, G. & Yeh, K. (2004). Understanding venture capital in East Asia: the impact of institutions on the industry today and tomorrow. *Journal of World Business*, 39, 72-88.
- Ahlstrom, D., & Bruton, G. D. 2006. Venture capital in emerging economies: Networks and institutional change. *Entrepreneurship Theory & Practice*, 30(2): 299–320.
- Ahlstrom, D. Bruton, G. D. & Yeh, K. S. (2007). Venture Capital in China; Past, Present and Future. *Asia Pacific Journal of Management*. 24. 247-268
- Batjargal, B. (2005). Networks Triads: Transitivity, Referral and Venture Capital Decisions in China and Russia. *William Davidson Institute working paper*, 752.
- Black, B and R. Gilson (1998). Venture Capital and the Structure of Capital Markets. *Journal of Financial Economics*. 47, 243-277.
- Bliss, R. (1999). A Venture Capital Model for Transitioning Economies: The Case of Poland. *Venture Capital*, 1, 241–257.
- Bruton, G. Ahlstrom, D. and Singh, K. (2002). The impact of the institutional environment on the venture capital industry in Singapore. *Venture Capital: An International Journal of Entrepreneurial Finance*, 13, 197-218.
- Claessens, S., Klingebiel, D. & Lubrano, M. (2002). *Capital Market Development and Corporate Governance in Poland: The Way Forward*. Retrieved April, 14, 2012, from <http://www.worldbank.org>.
- Da Rin, M., Nicodano, G. & Sembenelli, A. (2004). Public Policy and the creation of Active Venture Capital Markets. Retrieved April 14, 2012, from <http://www.emeraldinsight.com>.

- Da Rin, M. Hellmann, T. & Puri, M. (2011). A Survey of Venture Capital Research. *Forthcoming in George Constantinides, Milton Harris, and René Stulz (eds) Handbook of the Economics of Finance, vol 2, Amsterdam, North Holland, 2012.*
- DBSA & SAVCA (2009). *The Economic impact of Venture Capital and Private Equity in South Africa*. Retrieved July 23, 2012, from <http://www.savca.co.za>
- Davila, A., Foster, G., & Gupta, M. (2003). Venture capital financing and the growth of start-up firms. *Journal of Business Venturing* 18, 689-708.
- Engel, D., & Keilbach, M. (2007). Firm level implications of early stage venture capital investments: an empirical investigation. *Journal of Empirical Finance* 14, 150-167.
- European Private Equity & Venture Capital Association (EVCA) (July, 2012). *Central and Eastern Europe Statistics 2011*. Retrieved November 11, 2012, from <http://www.evca.eu>.
- Farag, H., Hommel, U., Witt, P. & Wright, M., (2004). Contracting, Monitoring, and Exiting Venture Investments in Transitioning Economies: A Comparative Analysis of Eastern European and German Markets. *Venture Capital*, 6, 257-83.
- Fourie, J. (1999). Mechanisms used by South African Venture Capitalists for dealing with risk in seed and start-up ventures (Master's Thesis). Graduate School of Business University of Cape Town.
- Gompers, P. & Lerner, J. (1998). What drives venture capital fundraising? *Brookings Papers on Economic Activity. Microeconomics*, 149-192.
- Gompers, P. and Lerner, J. (1999). *The Venture Capital Cycle*, MIT Press, Boston, MA.
- Gompers, P. & Lerner, J. (2000). The determinants of corporate venture capital success. In: Morck, R. (Ed.), *Concentrated Corporate Ownership*. University of Chicago Press, Chicago.
- Gompers, P., Lerner, J. (2001). The venture capital revolution. *Journal of Economic Perspectives* 15, 145-168.

- Guidotti, G. & Sagari, S. (2001). *Venture Capital Operations and their Potential Role in LDC Markets*. Retrieved from <http://www.worldbank.org>.
- Hege, U. Palomino, F. & Schwienbacher, A. (2003). *Determinants of Venture Capital Performance: Europe and the United States*. Retrieved on November 6, 2012, from <http://www.emeraldinsight.com>
- Hellmann, T. & Puri, M. (2000). The Interaction between product market and financing strategy: the role of venture capital. *Review of Financial Studies* 13, 959-984.
- Hellmann, T. (1998). The allocation of control rights in venture capital contracts. *RAND Journal of Economics* 29, 57-76.
- Hellmann, T. (2000). Venture Capitalists: The Coaches of Silicon Valley. (Reference incomplete from source)
- Ibanez, F. (1989). *Venture Capital and Entrepreneurial Development*. Retrieved July 23, 2012, from <http://www.worldbank.org>.
- Jeng, L. A., & Wells, P. C. (2000). The determinants of venture capital funding: Evidence across countries. *Journal of Corporate Finance*, 6, 241–289.
- Karsai, J., Wright, M., Dudzinski, Z. & Morovic, J. (1999). *Venture capital in transition economies: the cases of Hungary, Poland and Slovakia*, in Wright, M. and Robbie, K. (Eds), *Management Buy-outs and Venture Capital into Next Millennium*, Edward Elgar, Cheltenham, pp. 81-114.
- Kenney, M. Han, K. & Tanaka, S. (March, 2002). *Scattering Geese: The Venture Capital Industries of East Asia*. Berkeley Roundtable on the International Economy Working Paper No. 156.
- Klonowski, D. (2005). The Evolution of the Venture Capital Industry in Transition Economies: The case of Poland. *Post-Communist Economies*, 17(3).

- Klonowski, D. (2006a). Local Laws and Venture Capital Contracting in Transition Economies: Evidence from Poland. *Post-Communist Economies*, 18(3).
- Klonowski, D. (2006b). Venture Capitalist's Perspectives on Corporate Governance in Transition Economies. *Problems of Economic Transition*, 49(8), 44-64.
- Koh, W. T. H. & Koh, F. (2002). Venture Capital and Economic Growth: An Industry Overview and Singapore's Experience. *Research Collection School of Economics (Open Access)*. Paper 691. Retrieved on March 18, 2012, from http://ink.library.smu.edu.sg/soe_research/691.
- KPMG & SAVCA (2009). *Venture Capital and Private Equity Industry Performance Survey of South Africa covering the 2010 calendar year*. Retrieved July 23, 2012, from <http://www.savca.co.za>.
- Lamprecht, S.J & Swart, E. (2010). *SAVCA Solutions VC Survey*. Retrieved July 23, 2012, from <http://www.savca.co.za>.
- Lerner, J. (1999). The Government as Venture Capitalist: The Long-run Impact of the SBIR program. *Journal of Business*, 72, 3.
- Makomva, R. (2010). The creation of value in private equity: A South Africa perspective (Master's Thesis). Graduate School of Business University of Cape Town.
- Megginson, W.L. (2001). *Towards a Global Model of Venture Capital?* Retrieved July 23, 2012, from <http://www.emeraldinsight.com>
- Mlambo, C. & van Deventer, B. (2008). Factors influencing venture capitalists' project financing decisions in S.A. *South African Journal of Business management*, 40, 33-41.
- Mollica, M., & Zingales, L. (2007). The impact of venture capital on innovation and the creation of new businesses. Unpublished working paper.
- Peng, M.W. (2003). Institutional transitions and strategic choices. *Academy of Management Review*, 28(2), 275-286.

Peng, M.W. (2000). *Business strategies in transition economies*. Thousand Oaks, CA: Sage Publications

Polish Private Equity Association Yearbook (2002). Retrieved from <http://www.ppea.org>.

Polish Private Equity Association Yearbook (2003). Retrieved from <http://www.ppea.org>.

Polish Private Equity Association Yearbook (2004). Retrieved from <http://www.ppea.org>.

Polish Private Equity Association Yearbook (2005). Retrieved from <http://www.ppea.org>

Popov, A., & Roosenboom, P. (2008). *Venture capital and industrial innovation: evidence from Europe*. Unpublished working paper.

Portmann, D. (2010). *Private Equity and Venture Capital in South Africa: A Comparison of Project Financing Decisions*. (Master's Thesis). University of Cape Town Graduate School of Business, Cape Town.S.A.

Ribeiro, L.&Carvalho, A. G. (2008). Private Equity and Venture Capital in an Emerging Economy: Evidence from Brazil. *Venture Capital*, 10, 111-126.

Roodt, S. (2007). *Early stage venture capital funding in South Africa: why is there a shortage and how can it be addressed?*(Master's Thesis). University of Cape Town Graduate School of Business, Cape Town.S.A.

Salehizadeh, M. (2005). Venture Capital Investments in Emerging Economies: an Empirical Analysis. *Journal of Developmental Entrepreneurship*, 10, 253-269

Samila, S., & Sorenson, O. (2011). Venture capital, entrepreneurship, and economic growth. *Review of Economics and Statistics* 93, 338-349

Saxenian, A.L. (2007, September). *The New Argonauts: Global Search and Local Institution Building* .Presented at the Conference on Capitalism and Entrepreneurship Center for the Study of Economy & Society, Cornell University.

Seppa, T.J. (2003). *Essays on the Valuation and Syndication of Venture Capital*. Retrieved August 4, 2012, from <http://www.tuta.hut.fi/isib>

- Shim, D. (2006). Hybridity and the rise of Korean Popular Culture in Asia. Retrieved on November 5, 2012, from <http://mcs.sagepub.com/content/28/1/25.refs.html>
- Smith, J.K. & Smith, R.L (2004). *Entrepreneurial Finance*. 2nd Edition. USA: John Wiley & Sons. Inc.
- Seorenson, O. & Stuart, T. E. (2001). Syndication networks and the Spatial Distribution of Venture Capital Investments. *The American Journal of Sociology*. 106, 1546-1588.
- White, S., Gao, J., & Zhang, W. (2002, November). *Chinas Venture Capital Industry: Institutional Trajectories and System structure*. Presented at International Conference on Financial systems, Corporate investment in Innovation and Venture Capital, Brussels.
- Wright, M., & Robbie, K. (1998). Venture capital and private equity: A review and synthesis. *Journal of Business Finance and Accounting*, 25(5/6), 521–570.
- Wright, M., Lockett, A., & Pruthi, S. (2002). Internationalization of Western venture capitalists into emerging markets: Risk assessment and information in India. *Small Business Economics*, 19(1), 13–29.
- Zahra, R. F. (1997). Development in South Africa and Venture Capital: The Challenges and Opportunities for the Enterprise Fund for Southern Africa. *Berkley Journal of International Law*, 15. Retrieved November 11, 2012, from: <http://scholarship.law.berkeley.edu/bjil/vol15/iss1/5>.
- Zeng, F. (2004). Venture Capital Investments in China. Retrieved November 7, 2012, from <http://www.rand.org>.
- Few Woes in Warsaw*. (2011). Retrieved on June 11, 2012, from <http://www.economist.com>
- Poland Continues as Bright Spot in Region: IMF Survey online* (2012). Retrieved on June 11, 2012, from <http://www.imf.org>.
- Emerging Markets* (n.d). Retrieved on June 11, 2012, from <http://www.ftse.com>

APPENDICES

APPENDIX 1: List of respondents

RESPONDENT 1	
Name of Organisation	Business Partners Limited
Place of interview	Business partners Centre 23 Jan Hofmeyer Road Westville Kwa Zulu Natal
Respondents' name	Gerrie van Biljon
Respondents Title within firm	Executive Director
Year Formed	1981
RESPONDENT 2	
Name of Organisation	Industrial development Corporation
Place of interview	19 Fredman Drive Sandown Johannesburg 2196
Respondents' name	Christo Fourie
Respondents Title within firm	Head: Venture Capital SBU
Year Formed	2007
RESPONDENT 3	
Name of Organisation	Capricorn Capital Partners (Pty) Ltd
Place of interview	32 Impala Road

	Chislehurst Johannesburg 2196
Respondents' name	Gavin Chadwick
Respondents Title within firm	Managing Director
Year Formed	2003
RESPONDENT 4	
Name of Organisation	Treacle Private Equity (Pty) Ltd
Place of interview	Gleneagles Fairway Office Park 52 Grosvenr Road Bryanston Johannesburg 2021
Respondents' name	Jacob Mashike
Respondents Title within firm	Director
Year Formed	2000
RESPONDENT 5	
Name of Organisation	RMB Ventures
Place of interview	1 Merchant Place CorFredman Drive and Rivonia Road Sandton Johannesburg

	2196
Respondents' name	MbongeniMadonsela
Respondents Title within firm	Deal maker
Year Formed	2003
RESPONDENT 6	
Name of Organisation	National Empowerment Fund
Place of interview	West Block 187 Rivonia Road Morningside Johannesburg 2057
Respondents' name	ZwelibanziSapula
Respondents Title within firm	Head Strategic Projects Fund
Year Formed	2008

APPENDIX 2: Questionnaire

University of Cape Town Graduate School of Business: MPhil Development Finance 2012

Research Questionnaire

Venture Capital in Emerging Economies: A comparative study between South Africa and
Poland

Supervisor: Prof. Joshua Abor

Student: PumezaNdzululeka

**Venture Capital in Emerging Economies: A comparative study between South Africa
and Poland**

SECTION A: Background of Venture Capitalist

- 1. Name of Company:**
- 2. Postal Address:**
- 3. Respondents' name and title within the firm:**
- 4. Year formed:**
- 5. Source of funds in VC pool (Please tick appropriate column and row);**

Private	Donor	Institutional	DFI/Govt	Foreign	Other
Comments					

University of Cape Town Graduate School of Business: MPhil Development Finance 2012

Research Questionnaire

Venture Capital in Emerging Economies: A comparative study between South Africa and
Poland

Supervisor: Prof. Joshua Abor

Student: PumezaNdzululeka

6. Sector Focus (Please tick appropriate column and row);

Sectors	included	excluded
Information and Communication Technologies		
Real Estate		
Infrastructure/ construction		
Mining		
Energy		
Financial services		
Biotechnology		
Medical/ health related		
Industrial products and services		
Manufacturing		
Transportation		
Agriculture, Agro-processing		
Consumer related/ retail		
On-lending		

Others (please specify)		

University of Cape Town Graduate School of Business: MPhil Development Finance

2012

Research Questionnaire

Venture Capital in Emerging Economies: A comparative study between South Africa
and Poland

Supervisor: Prof. Joshua Abor

Student: PumezaNdzululeka

7. Stage of investments (Please tick appropriate columns and rows);

1	2	3	4	5	6
Seed: Research, evaluation and concept development	Start up and early stage: new set up or 1-3years in operation	Early stage expansion and development capital: breaking even or profitable entity.	Later stage development capital.	Pre-listing Development capital	Initial Public Offering
Comments:					

--	--	--	--	--	--

University of Cape Town Graduate School of Business: MPhil Development Finance 2012

Research Questionnaire

Venture Capital in Emerging Economies: A comparative study between South Africa and
Poland

Supervisor: Prof. Joshua Abor

Student: PumezaNdzululeka

8. Range of investment size in stages (Rands);

Stages	Min	Max
1. Seed		
2. Start up		
3. Early stage development and expansion		
4. Later stage development capital		
5. Pre- listing development capital		
6. IPO		

Comments:

University of Cape Town Graduate School of Business: MPhil Development Finance 2012

Research Questionnaire

Venture Capital in Emerging Economies: A comparative study between South Africa and
Poland

Supervisor: Prof. Joshua Abor

Student: PumezaNdzululeka

9. Number of current investments per stage;

Stage	Number
1. Seed	
2. Start up	
3. Early stage development and expansion	
4. Later stage development capital	
5. Pre-listing development Capital	
6. IPO	

University of Cape Town Graduate School of Business: MPhil Development Finance 2012

Research Questionnaire

Venture Capital in Emerging Economies: A comparative study between South Africa and Poland

Supervisor: Prof. Joshua Abor

Student: PumezaNdzululeka

SECTION B: EMERGING MARKET VENTURE CAPITAL CHARACTERISTICS

(a) *Entrepreneurs*

All questions are closed ended and require a Yes/ No response except where stated

	YES	NO
14. Does South Africa have a strong culture of entrepreneurship?		
15. Is a strong R&D culture into IT, medical and bio-technology fields especially in universities or national labs prevalent in S.A?		
16. Are there enough entrepreneurs venturing into the high risk, high reward sectors that are most attractive to venture capitalists?		
17. Are the entrepreneurs aware of venture capitalists and their role?		

18. Do VCs battle with getting reliable financial information?		
19. Are local businesses small and do they rarely prepare formal budgets, business plans and financial forecasts?	YES	NO
20. Are South African entrepreneurs adhering to international standards of financial reporting?		
21. Is performing due diligence and determining the viability of proposed investments on South African entrepreneurs a more lengthy and strenuous process compared to developed economies (USA)?		
22. Is there a prevalence of conflicting goals between the entrepreneurs and the venture capitalist?		

23. Do South African entrepreneurs' exhibit negative behaviour patterns (e.g. use of company resources for personal projects)?

Comments:

(b) Government

All questions are closed ended and require a Yes/ No response except where stated.

24. What role do you see government playing in the VC sector (Interventionist or enabler)?
25. Is government doing enough as an enabler to spur on the growth of the industry?
26. Are government institutions such as research councils, universities etc. producing IP (Intellectual property) that is commercially exploitable?
27. Has the government increased its spending on R&D to the benefit of the VC sector?

(c) Regulations

All questions are closed ended and require a Yes/ No response unless stated.

	YES	NO
10. Are current regulations conducive to the growth of the VC sector in S.A?		
11. Have the exchange controls in relation to IP negatively affected your firm? E.g. new medical devices		
12. Can restructuring Capital gains taxes for early stage investments be viewed as an incentive for investors?		
13. Is the South African market characterised by relationship based,		

network-centred structures and not a rule-based, impersonal exchange system?	YES	NO
14. Do you view current accounting standards as beneficial and enforceable?		
15. Is the South African labour market well regulated and conducive to the growth of the South African VC sector?		
16. Are corporate governance regulations weak and generally unenforceable?		
17. Is the South African economy characterised by ill-defined property rights?		
18. Is there a lack of intellectual property protection?		

28. Has the law been an impediment to any of the firm's transactions? (please elaborate)

(d) General

All questions are closed ended and require a Yes/ No response.

29. Is there a lack of well-educated professional managers with the required expertise in the VC sector? What in your view can be done to fix this?
30. Do South African VCs get minority stakes in firms unlike the majority stakes and board seats that they get in the developed economies?
31. VC exit mechanism more constrained and complex, usually strategic sales?
32. Are low returns for the VC (less than 20%) the norm in S.A?
33. What is the average IRR for your business?
34. Is there enough intense financing of good projects in the initial stages resulting in less financing being required in later stages?
35. Does S.A have sound monetary and fiscal policies, stable inflation and currency which are prerequisites for a nascent VC sector?

University of Cape Town Graduate School of Business: MPhil Development Finance 2012

Research Questionnaire

Venture Capital in Emerging Economies: A comparative study between South Africa and
Poland

Supervisor: Prof. Joshua Abor

Student: PumezaNdzululeka

SECTION C: VENTURE CAPITAL AND DEVELOPMENT

36. Does the VC view development as one of its mandates or simply as a by-product of driving entrepreneurship?

37. How many firms has the VC invested in since inception? ____

38. Have the VCs investments resulted in employment growth? (YES / NO)

39. Please list the employment opportunities that have resulted from the VCs transactions;

	Headcount before VC involvement	Headcount after VC involvement
Firm A		
Firm B		
Firm C		
Firm D		
Firm E		

40. Is the VC actively involved in the communities in which it invests? (YES / NO)

41. Is the VC involved in any continuous training and skills development? (Please elaborate)

University of Cape Town Graduate School of Business: MPhil Development Finance

2012

Research Questionnaire

Venture Capital in Emerging Economies: A comparative study between South Africa
and Poland

Supervisor: Prof. Joshua Abor

Student: PumezaNdzululeka

Any other comments that you wish to add about any aspect of the Survey